ACCESSION Nº

CLASSIFICATION

105,763

8525
U.S.

OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 1—1922.

15 JANUARY, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

NAVY DEPARTMENT
JAN 16 1963
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GOVERNMENT PRINTING OFFICE.
1922.

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OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 1—1922—15 JANUARY 1921.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
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Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
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Fifth Division Officer			
Marine Officer			

M.I.R. 4-4-24

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"AERIAL TRANSPORT" (BRITISH).

Source: British Naval and Military Record of August 31, 1921.

The airplane referred to in the above article is built by the Bristol Co. and known by them as the "Tramp." It was built for the Air Ministry and has been regarded as confidential. The plane has only recently been completed to a point where air tests are now considered and the air ministry has been requested for authority for an officer from this office to inspect the plane and witness the test; this has not been approved to date, but has not definitely been refused.

The following general information is known of the plane, only two of which have been built:

It was designed as a troop transport or freight carrier. It is a very large triplane, in general appearance similar to the Bristol "Pullman," which is an old type. There are many dissimilarities in detail between the "Tramp" and the "Pullman," and the "Tramp" has folding wings and considerable sweep back. The under carriage and landing gear are practically the same and the large spoon-shaped tail skid is the same. The "Tramp" has a biplane tail with three rudders and adjustable horizontal stabilizer; the fins are not adjustable. The arrangement of the fuselage requires the two pilots to sit in the nose; behind them and in a central engine room compartment are four 260-horsepower Siddeley Puma engines arranged in two tandem pairs, one pair on each side of the center line. These engines are geared to two large four-bladed propellers located in the leading edge of the middle plane, one on each side, and driven by geared shaft from the engine room. It is not positively known but is generally believed that the four engines are so fitted with clutches that they may be used in any combination, two driving each propeller or all four driving one propeller or in the various combinations. This plane with the present installation is known to be decidedly underpower, but no figures or estimated performances have been divulged, although as a troop transport they claim capacity of about 35 infantrymen with the requirement. The plane is fitted with four Imber self-sealing petrol tanks suspended in hangers from the top of the fuselage abaft the engine room, each tank of 80 gallons capacity. It is planned to equip the plane with full radio equipment, including wireless telephone. It is understood that these two planes have been built for a definite Air Ministry order.

In connection with the Bristol Co., they some time ago took over the rights of the Cosmos Engineering Co., and have employed Mr. Fedden of that company to redesign the three cylinder 100-horse-

power "Lucifer" engine and the 9 cylinder 400-horsepower "Jupiter." It has recently been learned that the "Jupiter" on which most of their effort is centered has completed type test required by the Air Ministry for engines suitable for commercial flying. This type test is reported to have been on a basis of 380 horsepower, and as such to have been eminently satisfactory. A report of the test is not now available, but it is expected that one soon will be. The Air Ministry has placed orders for 10 of these engines.

AERONAUTICS, JAPAN.

Source: Reliable.

21 October, 1921.

The Mitsubishi Internal Combustion Engine Co. (Nagoya) is under the supervision of Vice Admiral Takeda (retired) and Dr. Ito. Nine British experts are employed at this works. They were selected and sent out by Vickers (Ltd.) (all were Sopwith men). Mr. Hyland is the engineering expert, Mr. Smith is the designer, and Capt. Jordan is the flyer. The other six men are draftsmen and mechanics. Capt. Jordan's contract was made with the navy department direct, but he has been turned over to the above company, which is doing only naval work.

The plant was planned by the Japanese to turn out 200 planes per year, and sufficient motors (Hispano-Suiza) to equip them.

The same plant in England or America could turn out 600 to 800 planes per year. It is actually now employing 300 men and building at the rate of 20 planes per year, and has not yet completed a motor.

Work on the first plane (designed by Mr. Smith) was begun in February and completed November 16. A 300 horsepower Hispano-Suiza motor is installed. The motor was built at the Mitsubishi dockyard, Kobe. Successful trial flight was held September 17 and the plane was reported to have made 140 miles per hour. Maj. Smith, one of the British aviators at Kasumigaura, accompanied Capt. Jordan on this flight. Mr. Fletcher, the British designer at Yokosuka, was sent to Nagoya as an observer on this occasion.

When these British experts first arrived they were full of energy and ambitious to make a success of their mission, but they have been so checked and hampered at every turn that they have settled down to the inevitable slow pace of the country.

They advised building an armored plane but the advice was not followed. They also recommended building modern 200 horsepower and 300 horsepower Hispano-Suiza motors; the works have, however, decided to build at present only a 200 horsepower obsolescent Hispano-Suiza motor.

The Britishers receive a good salary but are also to receive a bonus for each plane built and successfully flown. So far this bonus has been nil and the slow pace of the works is very irritating to them.

They are also exasperated by the stubbornness. procrastination, and inefficiency of the Japanese.

On the day the above-mentioned plane was tested the two British designers, while walking through Nagoya, ran onto a new Sopwith plane. It was an obsolete type, having been designed by one of the above men five years ago. They are of the opinion that this plane was made in Japan without having obtained the patent rights.

The British naval air missions, for both construction and flying instruction, have not completed one-half of the proposed programs. The fault has been entirely due to the Japanese unpreparedness for them to begin work on arrival. Their present contracts expire in England in February, 1922. They expect to be asked in the near future to extend their contracts for six months or a year.

In reference to W–697 of 26 August, 1921, Mr. Fletcher has signed some sort of a new contract, probably for five years, because he signed a contract about October 1 to design six different types of seaplanes in the next five years. The plans for the first plane have been submitted and accepted.

Nearly all of the British aviators, at Nagoya, Yokosuka, and Kasumigaura believe that the naval aviation preparations are for war with the United States, but they consider the preparations inadequate. It is probably for this reason that they seem to be getting somewhat conscience stricken.

Airplanes and equipment are being made at the following places that have been given little previous mention: The Aichi Clock and Electric Manufacturing Co. (Nagoya) is equipped to manufacture about 50 planes a year and some motors. They were making the Yokosuka and Sopwith types for the navy, but all work on the Yokosuka type has been suspended, as reported in W–740 of 9 September, 1921. These works have begun making Hispano-Suiza motors, also for the navy, but none have yet been completed.

Kawasaki Dockyard (Kobe) is manufacturing Salmson planes and motors. These are for army use. The motor is absolescent and not a good one.

Muroran Steel Works (Muroran) are manufacturing Daimler motors for the army.

Tokyo Gas and Electric Co. (near Tokyo) has begun the manufacture of La Rhone motors on a limited scale.

Ikegai Works (Tokyo) have erected a new factory at Tsurumi, near Yokohama, for the manufacture of airplane motors. This

company has had considerable experience in the manufacture of internal combustion engines.

Andrews & George (trading company) of Tokyo have the only plant in Japan manufacturing spark plugs and magnetos for airplane motors.

Nakajima Works (Ota, near Nagoya) is manufacturing Nieuport and Nakajima planes for both the army and navy. These works are run by Engineer Lieutenant Commander Nakajima, now on reserve list.

Kawanishi Works (Hyogo, near Kobe) has branched off from the Nakajima Works and is manufacturing planes of its own design.

Ito Airplane Laboratory (Tsuda or Tatsuda, near Nara) is manufacturing planes designed by Mr. Inagaki. They are used by private aviators.

Two civilian aviators have planned the establishment of aviation schools near Nagoya. They are Mr. Sekiji Tateishi, whose former school at Atsuta, near Nagoya, was closed when he was engaged at the Oguri Aviation School, Tokyo, he is planning to reopen this school, and Mr. Sojiro Yasui, a civilian aviator of Kyoto, who is planning to establish a training school in Nagoya and also to organize a Biwa Lake Aerial Excursion Co.

The Hispano-Suiza motors, 300 horsepower, recently received from France are badly assembled, made of poor material, and nothing short of "duds."

The Short F–5 boat assembled at Yokosuka and referred to in W–740 of 9 September, 1921, is designed to carry four 230-pound bombs, 1 pilot, and 5 passengers and 400 gallons of gasoline. It is equipped with two 250 horsepower motors and has a radius of 9 hours at maximum speed.

The speed designed is 80 miles per hour, but when fully loaded can make only about 70 and has difficulty in rising. The longest sustained flight ever made by a plane of this type was 10 hours.

CONDITIONS AT VLADIVOSTOK.

Source: Reliable.

Conditions at Vladivostok and environs quiet. In the country districts and small outlying villages there are numerous Hunhutses and partisan raids.

The Japanese armored cruiser *Kasuga* sailed for Japan October 6.

A summing up of the press and the situation as affecting the interest of the United States will be very difficult. There is a great deal in the press that is pure mischievous propaganda, much of

which is for the purpose of creating jealousies between the nations, much of it intended to create favorable impressions of Japan, and much of it intended to be harmful to the best interests of the United States.

Japan endeavors to create the impression that she is sincere and honest in her relations to Siberia and China, does not desire territorial expansion, wishes "open door," etc.—pretty much the same tactics she has always employed.

I will endeavor to make as clear as possible Japan's position in Siberia to-day and what she really hopes to secure and how success on her part will affect the interest of the United States.

When a Japanese statesman or diplomat says North Saghalien he does not mean just North Saghalien Island but he means North Saghalien Province, which includes the mouth of the Amur River, Nikolaievsk, Decastries Bay, Marmsk, and Sofisk on the mainland of Siberia.

In order to appear magnanimous Japan may give up her claim to the mouth of the Amur River, including Nikolaievsk, and only press her claim for De Castries Bay, Marmsk, and Sofisk.

This will look innocent enough as regards the "open-door," equal-trade rights, etc., while as a matter of fact it will absolutely close the door to trade and investments to other nations in that vast region drained by the Amur River and its tributaries.

The mouth of the Amur is open to sea-borne commerce only for a few months in the year, due to shallow water and the narrow strait Nevesky causing ice jams.

The only harbor near the mouth of the Amur River and free from the Arctic ice floes is De Castries Bay. Japan has already built a breakwater here and will make of it a naval base. She prohibits any ship from visiting this bay and in fact prevents any person going there. Her plan is to build a canal from De Castries Bay to the Amur through Kisi Lake—entering the Amur between Marmsk and Sofisk. This will give her three months more navigation in both fall and spring than can be had from sea to the mouth of the Amur. This will give her a very small bit of land to defend from the Russians and would come within her means to defend even if she were forced by other powers to open the canal to them; still she would claim the right to exempt Japanese ships from tolls, due to the fact that the canal was built by the Japanese Government through Japanese territory; then she would exact such tolls on foreign ships as would practically close the door to other foreign trade in this region.

The detachment of Japanese expeditionary forces in the Amur region are now concentrated in five places, viz, Nikolaievsk, De Castries, Marmsk, Sofisk, and Petropavlovsk. One of the Japanese staff informed me that in the near future detachments would be withdrawn

from all the above places except Nikolaievsk and De Castries, in which places they have erected a sufficient number of barracks for quartering the troops in winter.

In the south sections of Siberia the Japanese are gradually concentrating their troops at Nikolsk, drawing them in from the outlying districts and sending detachments from time to time from Vladivostok to Nikolsk. This leads me to conclude that Japan will quietly evacuate her troops when ready, not through Vladivostok but from Nikolsk via the Sanchako wagon road and thence via trails to Possiet Bay, and that no one will know exactly when they have evacuated the Vladivostok section.

I am of the opinion Japan will keep her troops at Possiet Bay and endeavor to eventually annex to Korea the small section of Russian territory from a point north of Hun Chun to a point a few miles north of Possiet.

This again looks innocent enough but how will it affect American interest?

It will give Japan a seaport that is open to navigation throughout the year; it will give her an ocean terminal for a railroad built to Hun Chun and thence across Manchuria and Mongolia and extended later as she may see fit.

This with the possession of De Castries, means that Japan will possess every port in the Japan Sea except Vladivostok, means through tolls, railroad rates, and harbor dues (secretly rebated to Japanese), that the doors will be practically closed over large areas in both Siberia and China. It also means that Japan, in case of entering a war, can easily close the Japan Sea and keep her lines of trade communications with the continent through De Castries and Possiet with little risk of her trade lines with the continent being interrupted, and this is the great importance of Possiet and Hun Chun railroad to Japan for she could not long conduct a war without receiving supplies from the continent.

Japan thoroughly understands that she can not take and hold more Russian territory than the North Saghalien Province and Possiet region, and I note by the press that the Japanese residents of Siberia have petitioned the government not to annex territory which will later mean war with Russia, but to center all their efforts on getting trade agreements.

Press dispatches state that the Japanese have positively decided not to evacuate their troops from the leased territory of the Chinese Eastern Railway.

Evacuation of Japanese troops is a question that excites much newspaper comment. The Japanese news agency Yapta stated 11 November, on the day of the opening of the Washington Conference, other papers state that evacuation will not take place until

March, 1922, while the Japanese members of the Dairen conference acted as follows:

Chita delegates insisted that the question of Japanese evacuation should be included in the commercial agreement, while Japan rejected the proposal and demanded that this question be settled separately.

Vladivostok local government.—The local government was a puzzle to me at first, but after looking into the operation of the local provisional government I am forced to the conclusion that in reality there is no local Russian government.

It is a temporary body of Russians leaning to monarchy, utilized as a blind to execute Japan's will without Japan appearing to meddle with Russian internal affairs.

The present Government comes into power without any money in the treasury, with its authority really extending only to Nikolsk, with practically no arms or ammunition.

What has it done? Spent 636,000 gold roubles in spreading anti-bolshevik propaganda; declared on 20 June the annexation of Kamchatka, and sent an expedition on 24 September to capture Okhotsk and villages along the Kamchatka coast; sold Government property, 5,200 poods Australian wool, at 23 gold roubles per pood, to Japanese Firm Omigissi; and on 3 October sold at public auction cloth haberdashery, millinery goods, candles, hides scythes, fat, wax, soda, and other chemicals; on 5 October sold wool, glassware, and stationery; on 8 October sold copper, machine and vegetable oil, spun ware, chemicals, rubber, and tanning extract.

These sales of Government property brought very little cash and the Government is unable to pay its employees.

The Japanese refused to supply the Government with arms and ammunition or allow it to possess more than a limited amount, and that amount is under the inspection of the Japanese. On 8 October Japanese troops entered the local artillery depot near the local navy yard, surrounded the buildings as well as all neighboring Government buildings, took an inventory of the arms, and carried away with them the locks from all guns.

The Communist members of the local Parliament denounce the Kamchatka expedition, stating that it means war against soviet Russia and the Far Eastern Government; that the expedition (which has already captured Okhotsk) is sent out in the interest of Japan to prevent the American Vanderlip from exploiting concessions that were received from Soviet Russia, which concessions the local Government does not recognize.

Then it would seem to me that the local Government is supported, financed, and controlled in the interest of Japan; should the Japanese

evacuate the local Government could not hold out for one day; that the local Government will remain in office only so long as it executes the will of Japan; that as soon as Japan secures her 17 demands from Chita, which will give a sufficient guarantee to the lives and property of Japanese citizens in Siberia and evacuates Vladivostok and environs the present local Government will cease to exist.

The general tone of the press in that the Dairen conference will fail, the Chita Government presuming on the Washington conference will try to force unacceptable terms on Japan, and instead of granting the 17 demands made by Japan, is trying to introduce 7 demands of her own, the important ones being the evacuation of the Japanese troops and the return to Russia of all Russian territory, this includes North Saghalien and Kamchatka. Japanese delegates refuse to allow the question of Nikolaievsk massacre to be brought up on the ground that that question should be solved after the establishment of a stable government by all the powers and the question of Saghalien and Kamchatka have no relation to the Dairen conference.

The Vicherayaya Gazeta states that the Japanses diplomats have achieved a great success at Dairen: they secured special rights and privileges for the Japanese on the Russian Pacific coast, in the Okhotsk, Kamchatka, and maritime districts. Tokyo informed all whom it might concern that Japan has consolidated its former position in the Russian Far East and will not give up any rights and privileges she secured from the Chita Government. There is nothing for the Chita Government to do except annul the agreement or apologize to the United States Government for the special privileges granted Japan.

A pamphlet receiving wide circulation advocates the formation of Russo-German trade: it recites the historical reasons for such trade relations; points out the shaken commercial position of the entente, especially France; while, on the other hand, it shows the comparative economical strength of Germany, stating that the military disaster was for Germany greater benefit than the victory for the *entente;* it points out that Germany has always worked on large credit basis on conditions of payment after three years with only a small payment on account; that Germany trade industrial is more pliable in the sense of adapting himself to the conditions of the market and the tastes of the consumers than the Anglo-Saxons, who are proud of their superiority; that of the three nations—America, Japan, and Germany—who will enter the field in the near future, German capital is the most advantageous from the point of view of national interest, for American and Japanese capitals need only raw materials and a market for their manufactured articles, while Germany, besides a market, will look after possibilities of producing, using her capital

and developing Russian industry and working out Russian natural resources, leaving the products of their work on the Russian market and leaving the labor wages among the Russian population.

The press in reporting the trial of Baron Ungern gives the following statement made by the Baron; that he was a convinced monarchist, and then explained to the court that his intention was to form a central monarchy in Asia and in the conjunction he was working conjointly with Chan-Tso-Lin.

Baron Ungern was sentenced to death by the Chita court.

Washington Conference.—There are many views expressed in the press, each view depending on the political bias of the one expressing it.

Soviet, or bolsheviks, of course, see no good in America, among other reasons the fact that delegates were not invited from Soviet Russia. The monarchist are rather in favor of Washington and the United States will not let portions of Russia soil be taken by the Japanese or given over to them for colonization.

One paper states "The great republic of the United States, full of moral and material strength, proud of the thought that victory over Germany had been gained thanks only to her efforts and sacrifices she had brought to the common cause, collides with another power, old in culture but young as a military power, representing a complete contrast to the American democracy."

Japan does not want to leave predominance to America in the Pacific and on the Asiatic continent.

The third competitor in Asia, the former Russian Empire, has been expelled from the play.

The fourth power of the Pacific, Great Britain, is not likely to take any prominent part in the future conference.

The recent policy of Japan which shows evident features of her peaceful character, especially in view of Japan's plans of economical development in the Far East, is considered as a guarantee that she will be in favor of an agreement in the question of restricting armaments.

A press despatch, quoting Premier Hara, states that the Premier says Japan endeavors to reach a mutual understanding with the United States in the question regarding the Far East, that no nation is apt to ignore the strength of the United States in her efforts to guarantee world's peace, that the Anglo-Japanese alliance is continuing to be of predominance, that the Anglo-Japanese relations will become still more close, and that Japan is the best friend that China has; that to secure permanent peace among the nations of the world guarantees should be established for a possibly common and equal distribution among the nations of foodstuffs, clothing, and homes.

The Japanese battleship *Iwami* arrived 15 October and Rear Admiral Nakamura hoisted his flag on her the same day. The *Mikasa* will return to Japan for major repairs as soon as temporary repairs are completed.

There can be no overthrow of the local Government without the consent and aid of the Japanese.

There has been constant rumor during the past week that the Communists were plotting with the view of overthrowing the local Government. Color was lent to this by the arrival at Vladivostok of one of the leading Communists in Siberia, Mr. Tsetlin, who was under the protection of the Japanese at the Japanese Gendarmeeir headquarters. The local Government protested to the Japanese command against their harboring Tsetlin. The Japanese stated Tsetlin had left Vladivostok via the 15 October morning train. As a matter of fact, Mr. Tsetlin had taken refuge with a friend, Dr. Moysseyev, in Vladivostok, while giving a banquet to fellow Communists, at which banquet I am informed two Japanese officers were present. At 8:00 p. m. Saturday night, 15 October, three armed militia entered through the kitchen door and found Mr. Tsetlin seated at the banquet table. They opened fire, killing Mr. Tsetlin instantly.

The militia and all at the banquet except one woman and one man escaped before the police arrived. It will be remembered that before the last overthrow in Vladivostok Mr. Tsetlin was plenipotentiary representative of the Chita foreign department in Vladivostok.

I am of the opinion that the Japanese brought Mr. Tsetlin to Vladivostok to arrange the machinery for turning over Vladivostok to the Chita Government in case the Dairen conference should prove satisfactory to Japan.

From present indications the Dairen conference will be a failure. If such should prove to be the case Japan, I believe, would not desire an overthrow of the present Government until after the Washington conference.

As the local Government has no funds with which to pay its employees the Japanese are buying the monthly certificates issued to the local Government employees, making a big discount, and then the Japanese pay all customs duties and Government taxes with these certificates at their full face value, thus depriving the Treasury office of cash. Of course this is a pure business proposition but it indicates how completely the Japanese control the local Government as well as the local situation.

Capt. Simamoto, in a public statement, said the Japanese command considers the position of the maritime Government strong and that there was no probability of any overthrow, at least in the nearest future.

Due to Communists having charge of the Suchan and other mines and the further fact that a strike has been on for a long time, due to the fact that wages can not be paid, it looks as if Vladivostok will have a coal famine this winter. The Ussuri Railway, which has always been supplied with Suchan coal, is buying Japanese coal and has been buying it since July last.

The Japanese are taking advantage of the low prices at which real estate can be bought and are selecting and buying real estate most advantageously located, both for future business purposes and residences, throughout Siberia. *According to a published Japanese census the Japanese citizens in Vladivostok and environs now own more than one thousand pieces of real estate. Buying has been active in Habarovsk, Blagoveshchensk, Nikolaievsk, and other cities.*

The Japanese are active in taking advantage of present conditions to establish the supremacy of their trade further north. *She keeps two cruisers at Port Aiane.*

This is an important port for the reason that an automobile road is being built across the mountains to Nelkan on the Aldan River which, with its connection with the Lena and its tributaries, opens up a great fur and lumber region which extends from the Arctic Ocean to Ikutsk. In other words, horse or reindeer drawn sleds have a perfect road on the ice of the river bed from Nelkan to Irkutsk, and the Arctic Ocean at the mouth of the Lena River and Port Aiane is the best and only far northern seaport that offers an ocean outlet for this trade.

The Japanese have a trade station at Okhotsk and have established six trading posts from Okhotsk to Nijnie-Kolymsk at the mouth of Kolyma River. The trading route runs along a trail from Okhotsk to Plodbishtche-Stroenie-Sudov, on the Kolyma River, and thence along the Kolyma River to Nijnie-Kolymsk.

They have also established outposts at Yamsk, located on Yamskaia Bay at the mouth of the Yama River.

The above circumstances are recited to show how completely Japan is taking charge of the trade of those regions, and with the Japan Sea closed and the Okhotsk Sea closed by ice a great part of the year and the remainder of the year by the Japanese fleet at Yokahoma, she would not have to put either her warships or her merchant ships outside of the inland waters both to protect her interest and her trade for a prolonged war.

The following newspaper extracts are quoted as showing comments pertinent to both the local and international situation:

A "Golos Rodiny" editorial of October 13 is dedicated to the differences between Japan and the United States of America. The author dwells at length about the differences in the "racial" policy

of these two Powers and the difference in their economic policy, the American capitalists insisting on the policy of "open door," while the Japanese capital, being not so powerful as the American, seeks the protection of the Government, being unable to compete with the American capital in a fair way. The Japanese capital is looking for foreign markets by means of the Japanese protectorship over foreign territories or by the annexation of same, such as (Quantung, Port Arthur, Dairen, &c.) Province, Korea, Shantung, Sakhalin Island, Passiot, etc. The author is of the opinion that the conflict between these two countries is inevitable.

"Vladivo Nippo," of October 11, General Morvat, then being supreme manager of the leased territory of the Chinese Eastern Railway, in 1918 concluded an agreement with the Japanese Government after the Allied troops entered the territory of the Russian Far East, which consisted of five clauses, namely, (1) The Russian half of the Sakhalin Island is conceded to Japan; (2) Japan is granted special rights and privileges in Siberia and in the Russian Far East; (3) Japan is granted exclusive rights for working natural resources in the Far East to the east from the Baikal Lake; (4) Vladivostok is to be made an international port; (5) All Vladivostok fortifications to be destroyed.

"Golos Rodiny" says that according to a statement by the Berlin paper Tageblatt the United States Government is suggesting an establishment of a "Supreme Council on Far Eastern matters," which will be in charge of the Russian Far East also and will take care of the inviolability of the Russian Far Eastern territory from the aggressiveness on the part of Japan.

The "Soomeyki" publishes a long article from Osaka Minichi, dwelling upon the question about the increasing economic competition between America and Japan in Manchuria and Russian Far East. American enterprises have leased a number of concessions in Chirin, Heilundzian provinces, in outer Mongolia, and in the Far Eastern Republic. A Chinese-American company is being established in Manchuria, with a capital of 10,000,000 yen, for woriknq out forestry and mining resources in three Manchurian provinces. The same kind of Russo-American company will be established in the Far Eastern Republic for the purpose of working out natural resources of this country. The Americans are also financing some German enterprises in the Far East which have their branches there.

"Kuryer" editorial of October 16 says that Eastern States are intensively preparing themselves for the Washington conference, especially Japan. The author is not surprised at the great pains and efforts on the part of Japan to justify herself at the Washington conference, as the policy of Japan in China, Korea, and the Russian Far East is far from being fair and just. The attempts of Japan

to settle her relation with China with regard to the Shangtung question and with the Far Eastern Republic failed, so that she will appear at the conference in all nakedness of her aggressive policy. This is why the Japanese politicians are rather pessimistic with regard to the Washington conference.

The same paper publishes an interview with Mr. Kalmykov, senior inspector of the fishing department of the Maritime Government, who has recently returned from Nikolayevsk; he says that Nikolayevsk has been occupied by the Japanese, who have introduced a so-called Japanese "military administration" both in the city and in that region. The Russian fishing inspection has been deprived of the right of inspecting fisheries. The most part of the fisheries have been leased by the Japanese administration to the Japanese citizens, who export fish to Japan; only a small part (about 12,000 poods) was brought to Vladivostok on board of the steamship *Eldorado*.

A "Vladivo Nippo" editorial of October 12 regrets to state that the representatives of the Chita Government at the Dairen conference, not being satisfied with the results of the conference, are going on heavily with it and are trying to settle the matters at the coming Washington conference. The author says that this is to be regretted, but the policy of Japan will remain firm with regard to the Russian Far East, no matter what decisions will be passed at the Washington conference. Japan is not seeking any special rights and privileges in the Far East, but she will stand firm for her interests in the Far East, which are based on the present status quo. (This means that Japan will not give up the occupation of the Russian half of the Sakhalin Island, De-Kastri, and seizing the Russian fisheries in Sakhalin and Kamchatka waters and probably Possiet Bay. L. C. R.)

THE FRENCH NAVY AND DISARMAMENT.

Source: Reliable. French Press.

The article, the translation of which follows, is the second of a series of two articles appearing in the November number of the Revue des Deux Mondes. Both articles are included under the general caption "Avant la Conférence de Washington," which may be freely translated as "While awaiting the conference of Washington."

Attention is invited to the proportion of the naval portion of the German budget of 1914 to that which has been voted this year by Japan.

France has done better than limit her naval constructions, she has suspended them.

It is only the "nouveaux riches" who have not been seriously touched by the war who can afford the luxury of capital ships. France considers herself as seriously afflicted by these armaments which now exist by reason of the very cause of France's distress.

1. The limitation of naval armaments is the first question inscribed in the order of the day for the conference of Washington. Originally the reunion created by President Harding was merely intended to include England, Japan, and America, and was to be limited to the consideration of means appropriate to the reduction of expenses resulting from the building of the naval programs of these three countries. Moreover, the problem of the Pacific is essentially maritime. Its archipelagoes, disseminated throughout the ever-changing immensity of space by the stiff breezes of the trades, do not present in themselves a future sufficient to occasion a conflict between two great people.

2. The value of these islands of Oceanica is due to the fact that they constitute the routes of the ports of call which permit two races to penetrate into each other's country. Formerly the Pacific formed an impassable barrier to migrations bound from the West towards the East, on account of the normal direction of the winds which blow in the opposite direction. This fact explains why North and South America were peopled by Europe and not by Asia. What the Chinese junks never ventured to attempt, viz, cross the Pacific Ocean, the Japanese battleships can effect in a few days. In this insular part of the world there exists no method of domination other than that of naval forces.

3. Thus is explained the feverish activity displayed by the two antagonists in the construction of their war fleets. The American program is the most formidable that has ever been undertaken, since to the 19 capital ships which the Navy Department already possesses it is proposed to add 16. Japan, with a view to replying to this menace, is constructing or proposes to construct 15 new capital ships, which will enable this country to line up 27 fighting units of the first line in 1928 against 35 which America will have in commission, provided that this latter country has not in the interim again augmented her program of new construction.

4. If we reflect that the cost of each vessel exceeds 400,000,000 francs at the present rate, and that the cost of maintenance of these formidable machines of war is in proportion to their cost by £551,550 per year for a battle cruiser, type *Hood*, as compared with £403,560, for a battleship type *Royal Sovereign*, we shall realize the financial consequences of these projects and of the burdens which will weigh upon the peoples launched into such costly ventures. We have spoken of the maritime position of the United States and of Japan only as regards capital ships. But this tactical unit will naturally carry with it the construction of light submarine flotillas and similar escadrilles of aircraft commensurate with its importance. The naval budget of these maritime powers becomes, under these conditions, a veritable chasm. That of Japan for 1921–22 mounts up to 490,000,000 of yens; the naval expenses amount to 32 per cent in the total budget of the Japanese Empire, and included in this naval budget 17 per cent of its entirety is consecrated to new constructions.

5. The Naval and Military Record, comparing the Japanese budget of 1921 with that of Germany in 1914, remarks that the German Navy, the progress of which was so prodigious, entered only to the extent of 6.2 per cent in the total budget of the Empire, and was, moreover, only one-fifth of that which has been voted this year by Japan. Now, Japan is without question the coun-

try which obtains the best output from her naval budget, due to the low prices of labor and the pay of her naval crews. We may appreciate, under these conditions, the financial effort which is imposed on the United States in commissioning the fleet which she proposes to construct. Her naval budget, which is perhaps the highest, proportionally to the importance of its construction, mounts up this year to $410,673,289, or 10.5 per cent of the total budget ($3,900,789,200), the proportion due to the Army absorbing only 8.4 per cent. The United States, however rich they may be, are they in a position to sustain this effort? Will the people consent to authorizing the taxes necessary to face these expenses? Here we have the reason for the conference of Washington.

6. In the meantime, what is the attitude of England? Up to the end of the last century, the European nations were the sole possessors of fleets of war. The English policy consisted, therefore, in stifling any tendency toward naval supremacy on the part of other nations and to destroy their fleets before they became a serious danger for the insular security of Great Britain. The invincible armada of the Spanish in 1588, the fleets of Tromp and Ruyter, then the squadron of the King of France at La Hogue, the naval forces of Napoleon at Trafalgar, and, more recently, the battleships of William II at Scapa Flow, were annihilated before having been able to play any naval rôle. It is not, therefore, without reason that Admiral Jellicoe brings together the victories of Scapa Flow and Trafalgar, separated by an interval of a hundred years, as two memorable dates in the history of the British Isles. "The mission which he endeavored to fulfill" (i. e., Jellicoe—translator) had the same objective in view as that of Nelson. The means by which this mission was accomplished have alone differed. Trafalgar was a glorious defeat sustained by France, Scapa Flow a shameful surrender of the German fleet. The day on which the latter willfully scuttled her own vessels, England won the greatest victory of the war. The German squadrons thus eliminated, the Admiralty might have counted on a respite. But at this juncture, two new stars arise, one in the Eastern, one in the Western hemisphere; the menace has only changed latitude, but the storm has departed from the British coasts; it is concentrating far away over two continents, which eliminates the imminence of the danger. As for the question of the Pacific, its appearance has not been without its imporance, as it transfers to the Antipodes the field of action where the rivalries of Asia and America are to meet face to face.

7. However this may be, Great Britain can not hold herself aloof from the naval projects of Japan and the United States.

8. The time is passed when the vessels of Europe could affirm their power throughout all parts of the globe without meeting resistance. The next conflicts, if they arise, will shake the entire universe. It suffices to follow the evolution of the struggles which have deluged the earth with blood, in order to perceive that they extend further and further, and that they bring into conflict immense masses of people which become more and more numerous. Soon the dynastic conflicts of old Europe will appear to us as remote as the feudal combats which used to be waged at the gates of Paris. In the gigantic shocks which will be produced amongst the great races of the globe, the navy is called upon to assume the most important rôle. This is what our Government, hypnotized by the safeguarding of the Rhine, does not seem to have sufficiently appreciated, and it is exactly what the Foreign Office has completely understood.

9. France, in fact, might have built up a powerful navy on the ruins of that of Germany. The disappearance of the German dreadnoughts at Scapa Flow and the absolute arrest of our naval construction during the last seven years, have placed us in such a pitiable position that the French fleet will soon only

exist as a souvenir. Italy, who is at the present moment in even a more critical financial situation than ourselves, continues, nevertheless, the construction of her naval forces in a manner appropriate to her Mediterranean situation. She will have a considerable superiority over us after the completion of her program. (See the Revue for 11 of August, 1921.)

10. As for England, with a view to replying to the projects of America and Japan, she has just decided to lay down four superdreadnaughts. We are, therefore, the only country which appears to have renounced all idea relative to the reconstruction of her national marine. There could be no more extreme irony than that of requesting us to limit our naval armaments, since we have done better than limit them; we have suspended them. Thus is explained that originally it was not intended to invite France to the conference of Washington. We have, however, a voice in the matter. How can it be forgotten that we possess in the extreme Orient an empire which counts 18,000,000 inhabitants, which occupies a superficial area of 776,000 square kilometers, and the business transactions of which exceed two billions and a half? Even in the Pacific, we have centers of supplies of the first order or points of support, like Noumea, in Caledonia: Port Phaeton, in Polynesia; Nouka-Hiva, in the Marquesas: Rapa, in the extreme south.

11. Finally, since the colored question will be considered at Washington, France, who protects forty-four million native subjects, whom she has always treated as her own citizens, has, indeed, a few words to say in this discussion.

12. The provisional foundation of the program of the American Government anticipates the three following points: The principles serving as a basis of this limitation, the extent of this limitation, the execution of the decisions arrived at. It is beyond doubt, in the first place, that all the peoples represented will sincerely desire to lessen the burden of their budget expenditures, and hence to limit their naval armaments. But they would like their neighbors to make still greater sacrifices than themselves in favor of peace, which amounts to say that each one wishes to secure naval supremacy by most economical means. How determine the respective importance of the armaments of the various powers? What is the criterion which will serve for the adjustment of this question? We might assume as a point of departure the present tonnage afloat or existing on the 2d August, 1914. These two solutions would favor England. We might, on the other hand, bring in for consideration the program voted by the various powers. In this case it is evident that America and Japan would find an advantage, since they have profited by the recent hostilities to forge a powerful fighting equipment, this to the detriment of the former European navies. The only solution acceptable for France would evidently be that which would admit the tonnage of 1914, in view of the fact that since this date we have constructed nothing, and also unfortunately the naval program has not been discussed by the Senate. We would here invite attention to the eagerness with which the British House of Commons voted for the laying down of four superdreadnoughts of the improved *Hood* type, which will permit her to maintain the premise at Washington that she also is continuing the execution of the imposing project of new constructions.

13. The tonnage of capital ships, or the total tonnage afloat, including all types of vessels, is not the only standard of rights which a nation may urge. It is likewise important to have in view the security of States, to examine to what point this depends on sea power, to consult the chart of their shores, to estimate the importance of their colonial empire and of the merchant tonnage of all countries concerned, and in a general way to take into consid-

eration the necessities of the naval policy of the various powers, their external expansive force, the importance of their commerce, the state of their civilization, and, we also believe, the seniority of their maritime position. These points being laid down, let us imagine the basis on which each country will plead its cause before the conference:

14. First of all, the stand of the admiralty is easy to foresee. It is set forth in Chapter II of the book entitled "The Great Fleet of the Viscount Admiral Jellico, of Scapa," under the title: "Naval Strategy in the Home Waters," as well as in the recent discourse which Mr. Winston Churchill delivered before the House of Commons, at the beginning of last August, relative to the laying down of the superdreadnoughts to which we have just referred. According to Sir Jellicoe, the object and utility of the British Navy is the following: To assure to English vessels the full use of the sea, as being essential to the existence of an insular State; in case of war, to exercise a strong economic pressure on the adversary, depriving it of the use of the sea; to protect, to assist, and provision any army sent beyond the seas; to prevent an enemy's invasion in the British Islands or in the Dominions. As for Mr. Churchill, he declares that "if England remained in a situation of naval inferiority, she would no longer be in a position to insure her security." The ocean, which to-day serves as a link between the various parts of the empire, would be transformed into an impassable barrier; the British Islands could be provisioned and avail themselves of transportation, thanks to the permission of others. Mr. Churchill does not fear to affirm, "our interests are superior to almost all the other powers of the world; to attend the Conference of Washington without commencing the construction of four large units and *to consent at this Conference not to proceed to new constructions*, would be to place Great Britain indefinitely in a situation of enormous inferiority." This is equivalent to acknowledge that England will accept the limitation of armaments only on the traditional basis of her naval preponderance. The consideration for this preponderance had induced the admiralty to adopt before the war the axiom of the two-power standard, i. e., a power equivalent to the two strongest navies. To-day England abandons this principle to hold to a one-power standard, that is, to the construction of a force equal to the most important navy, but with a margin of superiority permitting her to dominate this hypothetical adversary.[1]

15. It is to be noted, in fact, that he who has the initiative of evolution can assemble all his forces with a view to surprising his enemy at the moment in which the latter is found with a number of his units immobilized in port by reason of repairs, hence the necessity of taking into consideration the percentage of available units which result therefrom.

16. To the British pretensions the United States will oppose the following arguments. If they are not obliged, as in the case of the British Islands, to assure the subsistence of their people by way of sea they have, on the other hand, to defend two extensive shores which face two continents. While the English squadrons can, from a point like Scapa Flow, assemble and await fleets which menace the mother country, the Navy Department is obliged to observe quite independently the security of her Pacific and Atlantic coasts.

17. The Isthmus of Panama is not a sufficiently rapid line of communication to permit in ample time the junction of the two fleets in case of a sudden attack coming either from the East or from the West. Now, it happens that England is allied with Japan. The United States may fear the coalition of

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[1] The position of England is, in spite of this, more solid than in 1914, because there no longer exists any European navy.

these two naval powers. It would therefore be to their interest to uphold the necessity of the two-power standard, and not for England, which, due to the disappearance of the German fleet, is disembarrassed of all concern relative to trouble originating in Europe.

18. In addition, if the United States have no colonial empire, they are most anxious to compel respect for their famous Monroe doctrine and to insure their power throughout the extent of the shores of the two Americas. They are finally obliged to acknowledge that the Asiatic penetration causes them disquietude, which is constantly increasing, and that their war fleet will be the best rampart for opposing this slow invasion. It is in this spirit that the Secretary of the Navy has reorganized the Pacific fleet, which is composed of all of the oil-burning dreadnaughts, while the Atlantic fleet will be made up of the oldest coal-burning battleships. The United States find themselves in a really paradoxical situation. They invented the League of Nations and they are the only ones not to form a part of it! They complain of the imperialism of other nations and they are the ones who have first engaged in the costly policy of the construction of battleships! They had a means of reducing our military expenses which they denounce, that is, to sign a treaty of defensive alliance with France, and they have rejected the signature of President Wilson. They invite the peoples of the world to limit their armaments and they take good care not to set the example! Finally, they rise up against the barbarity of the methods of war, and Gen. Fries, chief of the Gas Service coldly declares: "The Navy will make use of gas in its guns and in the form of clouds. The toxic gases will penetrate in the ventilating systems of the ships, the toxic clouds can be precipitated in torrents by aviation bombs or be sent subsurface by submarines. This must be, for example, white phosphorus which burns and can not be extinguished. Our program is complete." A suggestive picture of the future war, in the course of which the Union flatters herself in the employment of diphenychloarsine, of which she already possesses 2,000 tons stored at Edgewood.

19. We understand that, confronted by this perspective, Japan seeks to provide against all such gases and against all such clouds. Although they may be of the yellow race, the people of Asia have the right, as have we, to life and sunshine. Finding themselves arrested in their expansion toward the East, it is inevitable that they seek to break this resistance, and battleships are evidently the most appropriate force realizing this end, hence we see the possibilities which are going to present themselves at Washington. The whole question is that of Asiatic migrations transferred from the terrestrial domain to the maritime, and bringing into play the most scientific and the most radical processes of destruction. Let us listen now to the voice of France.

20. All the reasons which the three nations just enumerated can bring forward to justify the development of their national marine France may also urge. To nothing which is taking place in the world can she be indifferent; her commerce radiates over five continents; her culture has penetrated throughout the world. As for her colonial empire, the sole necessity of protecting it would suffice for justifying the construction of a large fleet. Is it desired that we should quote figures? The French colonial domain follows immediately after that of Great Britain, with a population of 52½ million inhabitants, and, including North Africa, a superficial area of 10,300,000 square kilometers, and commercial transactions amounting to 7 billion francs at par, as compared with 400 million souls, a superficial area of 34 million square kilometers, and a business transaction amounting to 42 billion francs for the British Empire. If we consider that our colonial power dates from the Third Republic, we shall thus

appreciate, at its just value, the development of France beyond the seas, which development is leading each day toward a greater prosperity. We are about to undertake gigantic enterprises in our colonial possessions. We have, therefore, the imperious duty of jealously guarding these overseas treasures. As for our interests in the world, they exist wherever, during the past centuries, the science of our engineers and the genius of our financiers have penetrated. In Egypt, in South America, in the Far East, and in China, France's capital invested in local affairs is enormous; so far as concerns our merchant marine, it will soon attain 5 million tons. It occupies the third place, immediately after that of England and the United States, and the tricolored flag is floating aloft over magnificent mail vessels. Are we about to abandon to others the task of assuring the police and the protection of this precious floating fortune?

21. Let us bear in mind, likewise, that vessels are the best agents of propaganda abroad. Our influence depends upon them. We are in an absolutely deplorable situation in this respect, since we can send to distant seas only old crews of an antiquated type, the effect of which is more harmful to our cause than it is beneficial. Our missions voyage on such vessels as the *Jules Michelet* and the *Gueydon*, constructed over 20 years ago. Let us remark, moreover, that France, by reason of her international obligations, should be equal to participating in the cohesive measures which may be suggested by the council of the League of Nations, with a view to constraining a nation to respect the clauses of the covenant. We have received the mandate of administration for certain territories, which leads us to dispatch naval forces to the Levant. What impression can be produced by these old units of the Republic in the Turkish Straits, in the presence of 5 superdreadnaughts, of 5 light cruisers, of 18 destroyers, and of the aircraft carrier which England just despatched to that locality? Whether one wishes it or not, it means obliteration. Moreover, these reasons are but secondary; there is another one which dominates them all. France must count on herself for the preservation of her national security. This security can not exist without a powerful navy. First of all we find ourselves in a situation analogous to that occupied by America, obliged as we are to orient ourselves in two directions—the Atlantic and the Mediterranean. In the Atlantic we must maintain a force absolutely independent of that which we may have in commission in the south, as the passage through the Strait of Gibraltar is too long or too precarious for us to count upon a concentration of our squadrons at a desired moment. We shall have, therefore, to insure the involability of our shores which extend from Dunkirk to the Bidassoa, while at the same time having a squadron capable of blocking that of the German reich; that is to say, that it must be composed of vessels superior to the 8 cruisers, to the 8 battleships, and to the 16 destroyers which Germany is authorized to retain and to replace by virtue of the treaty of Versailles. Moreover, as our delegation explained to the League of Nations, the absolute security of communication between the ports of the coast of Provence and of Algeria-Tunis, as well as between western Africa and our ports on the east coast, constitutes a vital necessity for the republic. It is for us the most elementary prudence to maintain in the Mediterranean a force superior to that of the strongest navy represented in this sea, without anticipating, moreover, the eventuality of a possible conflict with a Mediterranean nation, whichever it may be.

22. Can it not be said that France is obliged to suppplement the numerical inferiority of her population, relative to that of Germany, which may, tomorrow, become the ally of sovietic Russia, by the mobilization of her African army? The lake which separates European France from African France must

be a French lake. How is it possible that there exists minds so uninformed as not to understand that the fate of our country, which will be contested on the Rhine, will depend on the more or less prompt and more or less absolute mobilization of our African forces? The maritime lane from Marseille to Algiers is only the prolongation of the line of railway from Strasbourg to the Mediterranean. To desire to have others administer this line of communication absolutely essential to the existence of our country would be a lack of foresight, as unpardonable as to turn over to the hands of foreigners the railway system of the Paris-Lyons-Mediterranean. The immediate future of France is therefore intimately bound up with its Mediterranean supremacy. This supremacy conceals no imperialistic aims; it is simply the consequence of the geographical situation of France on the Rhine and of the disproportion which exists between the German and Latin races as regards the numerical expression of their respective population. Far from contesting this theory, our Italian friends can only approve it. Even now, their light forces are in a position to paralyze the mobilization of our native army, the veritable shield of our fatherland. Is it not permissible that we should be seriously moved by this state of affairs?

23. That which precedes would excuse us from bringing out in bold relief the claim that France has a right to the construction of a national navy, by reason of its past and its traditions. France would descend to the rank of the small powers, or rather to that of the incomplete powers, if she were not to possess appropriate naval forces. We have set forth the rôle which these forces might be called upon to play in future coalitions. The navy is the arm of the future. Alliance with our country will be solicited if, to the prestige of her history, to her civilization, to her traditional fidelity, to the renown of her army, she adds that of an active navy. Does not the navy, in fact, constitute the most practical activity for enforcing order throughout the world? It should always be our duty to insure our presence whenever this order might be troubled. Let us now examine what France may request at Washington.

24. No nation can desire more than she the limitation of naval armaments. Only the newly rich, those who have not been seriously affected by the war, can offer themselves the luxury of capital ships. Although not actually engaged in construction, due to lack of financial resources, the Rue Royale (French Navy Department—Translator) has not permanently renounced the possession of capital ships. France considers herself seriously afflicted by these armaments, born of her distress (i. e., armaments which owe their very existence to the causes which have produced France's distress—Translator). Our representatives, who will very probably be assisted by Admiral de Bon, will have, therefore, to insist as far as may be able on the limitation of armaments, but they will have, in addition, to protest most energetically against any theory which will tend to assume as a point of departure for the limitation, the present state of our squadrons. France has subordinated, during the course of the war, the interests of her maritime power to those of the allied armies, and her arsenals have fabricated war material for the latter, who have thus been free to reconstruct themselves due to the assistance that we have brought to them. Because we have undertaken no new construction for seven years, it would be unjust at this time to urge this decision against us as a "fait accompli." We can not therefore accept a system of limitation of naval armaments leading to the consolidation of the present situation, that is, to the famous holiday which has so often been proposed by the Anglo-Saxon power. Our nation has independence and could not accommodate itself to this interpretation.

25. To what extent is it contemplated that the limitation of armaments will be carried? It seems that the League of Nations had desired to consider a budgetary limitation. Nothing could be, according to our idea, more illogical even taking into consideration a difference in exchange. The budget of two countries are not comparable; the cost price, per ton constructed, varies according to the price of labour and the cost of raw material. Armament is a function of the pay due the crews, of the price of coal, etc., which are not the same in all countries. The comparison of the budgets of 1914 and 1921 contributes to no more exact results, as certain budgets, like ours, have to carry the dead weight of their arsenals, which influence unfavourably the general output of the complete organization. The only criterion on which it appears reasonable to base a comparison is tonnage, and this indication must nevertheless be seriously corrected. It will be necessary to demonstrate that one ton of new naval construction has no relation respecting one ton of old construction; hence the necessity of taking into consideration *a military coefficient of sinking fund.* In addition, a ton of battleship armour has not the same intrinsic value as a dispatch vessel. The situation of French tonnage is particularly vexatious as it is composed of old vessels, particularly cruisers, which are absolutely of obsolete type. What is to be said finally of our recent vessels, made up of a multitude of dispatch vessels, sloops, etc., of which it would be better even to make no mention? The method of classification which would permit of a good appreciation respecting the importance of Navies would consist of taking the tonnage of superdreadnoughts, at the same time attaching to each tactical unit all the auxiliary tonnage made up of surface, submarine, or aerial craft which would accompany it. In this case, it would be necessary to inscribe to the credit of the Rue Royale (Navy Department—Translator) all the tonnage which it should have constructed during the last seven years, this for the reason that, under present conditions, the situation of capital ships would appear very much as follows: England 30, United States 19, Japan 12, France 3—this counting our three vessels of the Bretagn class, armed with 343-mm. guns as capital ships—this basis of discussion would be inadmissible to us.

23. Whether we call these vessels "capital ships" or "superdreadnaughts," they will remain the armored tactical unit which is to assure to a nation its naval power.

24. We must for the moment renounce the construction of such vessels, due to lack of money, but at the same time specify at Washington that we shall have the right to lay them down at such time as we may select in numbers sufficient to assure us the mastery of the Mediterranean and to constitute an additional fleet capable of turning the scales in favor of the power on whose side this fleet might enter.

25. This is the only way which permits France to fulfil her mission and to show herself commensurate with her victory. There is another point which is not less essential. A continental nation like ours, obliged by its geographical situation to conserve armies proportionally larger and to partially sacrifice its navy, should be authorized to preserve a proportion of defensive elements relatively higher than that of the great maritime powers. These elements are represented principally by submarines and aircraft. We must therefore oppose any attempt which would have in view, first of all, the prescription against the employment of the submarine, the only means which offers itself to a poor nation for forcing respect to its shores and preventing landing. In addition, let us plead that we be accorded in the Atlantic, a sufficient number of flotillas for protecting our shores against any eventuality. The aerial flotillas present

for us this double advantage—that of being able to turn equally well toward the sea or toward the interior, and of being an arm of the highest output, since it operates in a domain commensurate to both elements. It is important that, respecting maritime aviation, our delegates show themselves particularly exacting. France desires to live in peace with the whole world; but she insists on retaining the advantages which have cost her so dearly, and avoiding the return of catastrophes comparable to that of 1914.

26. Finally, it will suffice to spread out before the eyes of the conference the chart of our colonial empire and the statistics of our merchant fleet in order to obtain the right to the construction of fast cruisers and destroyers which are commensurate with our interests. Finally, the question of the limitation of armaments is not, at this time, applicable to us; but we must anticipate the future by reserving to ourselves, later on, the possibility of constructing as many capital ships as our world situation may dictate to us. In the meantime we ask to have the privilege of possessing a marked superiority of defensive tactical matériel—submarines or aircraft, and to maintain a light fleet in proportion to the extent of our domain beyond the seas. Subject to these reservations, let us contribute with all our might to calming the fever of naval armaments which agitates the world. We shall have at Washington a "standing" so much the more unassailable in that we shall be able to say: "We are not the ones who have commenced the construction of vessels."

27. It has been maintained that the fate of France must be contested on the Rhine. Naval preoccupations must be relegated to the background. We think we have demonstrated that on the contrary the two questions are clearly connected. It gives proof to a singular narrow-mindedness to circumscribe within our home frontiers the future of what we shall call the French Empire, in the sense which should be attached to this term as a symbol of the external expansion of the race, in the same sense as in the case of the British Empire, the American Empire, and the German Reich. We give up, under these conditions, any attempt to understand the intervention which has retarded the voting of naval credits, and we regret that we have to combat in the Parliament two sorts of enemies which are arraigned against our naval power, viz, the blind, who do not appreciate its importance, and the demagogues, who esteem their electoral interests above that of our forces on the sea. We count upon the patriotic clairvoyance of Mr. Raoul Peret to direct the Chambers, over which he presides with so much distinction, toward a more exact comprehension of our maritime interests.

28. Certain elements feel that such a program may offend our British friends. None more than ourselves are partisans to tightening the bonds of friendship which exist between our two nations. But it is exactly by reason of this friendship and because we are convinced of the community of our interests that we refuse to accept this objection as serious. The admiralty will esteem us the more as we represent ourselves to be companions at arms worthy of her "great fleet"; in fact, it is knowing the English imperfectly to suppose that they will stand against our legitimate demands. Moreover, the additional fleets of which we have spoken are not intended for any other purpose than to be placed in the service of the tacit Alliance which we have contracted with them. If they doubt this, they have only to grasp the pen which we extend to them and sign the pledge which was included in the treaty of Versailles and which still remains in the hearts of the French. In the meantime, we can not imagine for a single instant that there can arise a division between our two peoples. The best gage of our alliance is our two million dead, who sleep side by side in the battlefields of the Somme and the Artois. But since we have had re-

course to this mournful and too classical image, may we be permitted to say that there exists throughout the four corners of Africa and of Asia the sepulchers of our colonial soldiers who have fallen on the feverish soil to insure the benefits of our civilization. Were we some day to be tempted to renounce the idea of a national marine, the voice of these heroes, rising up in all latitudes, would dictate to us our duty. We have not the right to sacrifice, through lack of foresight, the fruit of several centuries. History confronts us, unfortunately, to show us how a great colonial empire is acquired, and how it is lost.

GERMAN NAVAL FIRE-CONTROL SYSTEM, GENERAL DESCRIPTION OF.

Source: Reliable.

The fire-control system in the German Navy has been the result of a steady growth along the same lines for the past 12 years. At no time has the fundamental system been abandoned or changed during this period. Briefly, the most important features of this system are:

(1) A method of follow–the–pointer in train.

(2) A centralized control of fire located in the forward control stations.

(3) Reserve stations for centralized control in the after control station, foremast, and central stations.

(4) A determination of the range and rate either in the control station itself or in the space immediately adjoining the control station.

(5) Arrangements for operating in train the guns, searchlights, and range finders as a single unit from one or more control stations simultaneously.

(6) The employment of the Siemens "Rough" and "Fine" motors for transmitting electrically all orders for range and for train.

(7) The use of automatic range finder averaging instruments.

(8) The establishment of the rate from the average range finder reading.

(9) The centralization of the control of fire in the gunnery officer (actual decision regarding application of "spot" and change of "rate" are made by the gunnery officer).

(10) The use of the range finder as an additional check on the spotter and on the range clocks, particularly in giving the hitting range at the commencement of an engagement.

As further progress was made it became necessary to adopt "indirect fire" (which with slight modifications is called "director fire" in our Service). The system as a whole was not changed, and provision was made for transmitting angles on elevation to the guns instead of transmitting sight ranges to the sight setter. It should be noted, incidentally, that these ranges or angles were transmitted continuously and automatically by the electrical range clock.

It is both interesting and important to note that at the battle of Jutland the German vessels were fitted with installations which accomplished the foregoing and had at that time a synchronous system of follow-the-pointer in train. The electrical system of transmitting angular elevations to the *sights* of the guns also was synchronous. The director scope and target-bearing transmitter were separate instruments at that time. Since that battle further developments have been made which will be discussed in this report.

Attention is invited here to the state of development of the German fire-control system at the time of the Jutland battle in order that a proper perspective as to their progress in these matters may be obtained by a comparison of it with the fire-control system existing at that time in both British and American navies.

As a final development motors were substituted at the secondary battery guns for the gun pointers and the angles of elevation transmitted direct to the operating motors. In the case of the main battery, electromagnets control the hydraulic elevating gear. It is worthy of note that in the last two systems mentioned the system was fitted with repeat-back devices so that the gunnery officer could determine whether or not a system was functioning correctly. The development of the so-called "A. G." device (gyro) replaced none of the above-mentioned systems but simply supplemented them and permitted the use of same in cases where the target was obscured by smoke or otherwise, and permitted a greater accuracy of fire in cases where the rolling of the ship was very heavy. It furthermore automatically corrected for the *speed* of the roll of the vessel and for the *firing interval*, which will be described later.

In general, the transmission fire-control system or installation of electrical instruments consists of a "Grube and Fein" system of electrical transmission of the proper bearing of the target and the angular elevation corresponding to the range of the target with certain corrections superimposed thereon. The "Rough" and "Fine" systems are similar installations, the "Rough" system being used to obtain the approximate bearing or angle of elevation, and the "Fine" system giving a more accurate reading. Error due to both electrical and mechanical systems does not exceed one-sixteenth of a degree or 4′ of arc. In the main battery system green lights showed throughout on the faces of the transmitters and receivers when the main battery is being used to starboard. Similarly, red lights indicate when the main battery is being used to port. A third light blue in color indicates to the pointers that "search" is being made and not to follow.

Target-Bearing Transmitter.

As previously stated, the original system consisted of a transmitting device known as the "richtungsweisser." This device was es-

sentially an instrument which controlled the battery in train by means of the Siemens follow-the-pointer system. It might be designated as a "target-bearing transmitter."

The instrument is also arranged so that the searchlights and range finders may also be controlled in train by the same "R. W." In this case the parallax for the searchlights and range finders is also corrected for in this instrument.

The receivers at the guns are fitted with two dials, the graduations on one dial being in degrees; while on the other the least reading is one-sixteenth of a degree. The two motors operating the pointers on these dials are designated as the "Rough" and "Fine" motors, and are geared together in the ratio of 45 to 1. The counterpointers on the outer circumference of the dials are mechanically operated by the guns as they are trained. It then becomes the duty of the trainer to keep the counterpointer covering the electrically driven pointer. In the case of the main battery there is a green and a red band on the outer rim of the rough dial, and in addition a green and a red light. These lights indicate to the trainer whether the train is to starboard or port.

There is no repeat-back system on the target-bearing system for train. Arrangement is made so that any one of the stations may take over control while the other target-bearing transmitters follow the controlling "R. W," or control separately another group.

In the arrangement for battleships and battle cruisers there is one "R. W." in each control station in the main battery and two "R. W." for the secondary battery, one for each side, the main battery "R. W." being arranged to train through 360° and standing with its mirrors somewhat higher than the secondary battery "R. W." It is also possible for the main battery "R. W." to take over the control in train for both main and secondary batteries by means of switch connections between the two devices. In this case the switch must be thrown in "central" (plot).

The system is absolutely synchronous, so that any "R. W." may be connected, by throwing switches in central, to take over the control at any time, regardless of the previous train of the instrument. As a general proposition, unless fire was divided, one "R. W." controlled the entire battery while the other "R. W." in the other stations followed. If all the "R. W." are following properly the train of the controlling "R. W.," then when the command was given to shift to another control station the switches in central (plot) were thrown accordingly; and if the pointers on the receivers "jumped" it was an indication that something was wrong, and shift was made to another station. If all is in order in the station the shift is made without the guns being aware of the change. When a shift in control

from one "R. W." to another "R. W." is made, since the switches are thrown in central (plot), all instruments automatically go to the same reading as the new controlling "R. W."

The parallax was automatically taken care of in the instrument so long as the approximate range was set on a special scale on the "R. W." This device is not shown in photostat No. 1 because it is on the opposite side of the "R. W." A similar device will be referred to in a more modern "R. W." described later in this report, and on this instrument the scale and device may be seen in the photograph.

The "deflection corrections" due to wind, speed of enemy, etc., were set on the special scale on the "R. W." and transmitted to the battery as part of the target bearing. This deflection was not applied to the bearing transmitted to the range finders nor to the searchlights.

Night Control Stations.

As it is difficult for the "R. W." in the inclosed control stations to pick up a target at night, special target-finding or searching instruments were located on the bridge wings, and in the case of light cruisers in the fore top, which picked up the target and transmitted the target bearing electrically to the "R. W." in the inclosed control station. In construction it does not differ much from the "R. W.," except that it has a larger field and does not correct for the parallax, etc., but simply transmits the bearing to the "R. W." in the controlling stations. In this event the controlling station "R. W." simply follows the pointer of the "Rough" and "Fine" receiver until the target is visible or until the command is given, "Light!" When this command, "Light," is given, the battery opens fire practically at the same instant as the light illuminates. One main battery "R. W." may thus follow this searching or finding "R. W." with the main battery, secondary battery, antiaircraft battery, range finders, and searchlights all connected to it. At the order, "Light," everything opens fire in that case.

Searchlight Control.

The secondary battery guns are divided into four groups, two forward (one on each side) and two aft (one on each side). The searchlights of the after groups are controlled by the secondary battery "R. W." The searchlights of the forward groups are controlled by the main battery "R. W." under the normal arrangement. The Germans used distant mechanically controlled searchlights, so that the trainer was stationed below and about 30 feet to one side of the light. The repeat back pointers from the searchlights themselves to the operator at the mechanically controlled station then had to be driven by small electric motors geared to the base of the searchlight. These small electric motors transmitted or repeated back to the searchlight mechanical-control operator, who received it by means

of the large covering pointer on the left-hand dial of the searchlight target indicator. This special type of counterpointer was used because it was easier to see at night.

The searchlights of the after groups were placed under the control of the secondary battery "E. W." because in night destroyer attacks the ship upon sighting an attacking destroyer immediately turns away without signal (according to doctrine in the German Navy), which automatically brings the after group of secondary battery guns and the after searchlights covering the attacking destroyers. The searchlight target indicator is a "Rough" and "Fine" receiver located at the searchlight mechanical control station and indicates the bearing transmitted to it electrically from the controlling "R. W." The function of the large special type covering counterpointer shown on the left-hand dial of this instrument has already been described above. The use of the red, green, and blue lights has already been described. The object and use of the yellow lights appearing on this instrument and on other receivers of the secondary battery is not understood. It first came to my attention in writing up the report.

Range-Finding Control.

The range finders were controlled in the same manner as the searchlights and the guns from the "R. W." The turret range finders were connected always to the "R. W." controlling the main battery. The exposed range finders, of which there were usually three in number, also could be connected to the "R. W." controlling the main battery and are connected to it when both main and secondary batteries have had designated for them the same target.

It was so arranged that the deflection which was sent to the guns was not transmitted to the range finders (nor to the searchlights). The target bearing transmitted to the range finders was corrected for parallax at the "R. W." itself in the base of the "R. W." (which is likewise the case with guns and searchlights).

The particular advantage of the arrangement of the searchlights and guns was that in a night engagement the searchlights and range finders could be controlled with the guns as a unit using either divided or concentrated fire.

Range and Rate.

Range and rate are combined under one subject for discussion, owing to the special manner of automatically determining the rate by use of the range which was employed in the German Navy and which will be obvious from the discussion. On board each of the battleships and the battle cruisers were seven (7) stereoscopic range finders, including one mounted in each turret. Each range finder was fitted with an electrical transmitter which transmitted the range

to the "range finder receiver and range averaging instrument" (which is one combined instrument). (A later and more improved device of this nature will be described a few paragraphs further on in this report.) The range from each range finder is indicated separately on its own dial (colored). For the rest of this discussion we will call this instrument the range-averaging instrument. Above the range-averaging instrument is a small box fitted with lights which indicate which range finders are operating on the range receiver and averaging instrument. The large dial at the bottom of this instrument shows automatically the average range of those range finders which are cut in.

A special device is installed and electrically connected to the range-finder receiver and range-averaging device which permits the cutting out automatically of any range finder which is evidently in error. When this device cuts out any range finder the light in the small box at the top of the range-finder receiver and range-averaging device goes out, thus indicating that this range finder is no longer operating in connection with the range-averaging device. The four buttons (there is one button for each range finder, which are usually seven in number) are pressed by the range-averaging device observer when the light just referred to goes out and the pressing of this button rings a bell at the particular range finder in question and thus calls the attention of the operator to the ranges of his instrument which are obviously an error.

The range-averaging instrument operates electrically to average these ranges from as many as seven range finders. As above indicated, the device is so arranged that any range received which differs from the other ranges more than a definite amount will be automatically cut out and eliminated from the average.

The "Gangmittler" is used to obtain the rate of change of range resulting from the average range. The seven colored range-finder receiving dials, the small box at the top with a light for each range finder, and the dial at the right with the colored figures are the same as that described in the instrument. The dial on the right indicates the average range automatically obtained from the individual range finders, as already explained. The open counterpointer on this dial is driven by motor and friction disk arrangement at such a rate that the larger covering counterpointer keeps the range pointer (open counterpointer) covered. When this is the case the rate is read off directly on the left-hand dial, which is graduated to show the rate of change of range in 100 yards per minute. In other words, when the friction disk arrangement is properly set by hand at the right of the instrument, the large covering counterpointer will move and continue to be opposite the smaller range pointer (referring now to the right-hand dial), and when this occurs the rate of change of

range is accurately determined automatically and is indicated automatically on the graduated dial at the left. The graduations on the scale of this left-hand dial run from a least rate of 40 meters per minute to 24 meters per minute. The operation then is as follows: The range finders which are following the controlling "R. W." are cut in on the range-averaging instrument, the ones cut in being indicated by the lights in the box at the top. The average range-finder range having been established automatically by the instrument, the speed of the electric motor in the "Gangmittler" is so regulated that the counterpointer keeps the pointer of the range-averaging dial covered. The rate is then read off directly on the left-hand dial. Another small dial just to the right of the range-averaging dial indicates whether the rate is increasing or decreasing.

One of these instruments is located in each control station and in the central (plot), and in each case is under the supervision of a special range officer.

In the case of small cruisers the system is identically the same except for the number of range finders, which is necessarily reduced.

A special type of range receiver also is built for the range finders which are not mounted inside turrets. The lever at the top is a switch for cutting in or out these range finders. The levers at the right and left are switches for cutting in or out each individual range finder separately. This particular type of switch is interesting in that it enables the entire instrument to be completely water-tight. (Attention is especially invited to this feature here, as a similar arrangement was made in the case of all electrical switchboards in the central or plotting room, each section of the switchboard being completely inclosed by one cover which was water-tight.)

Pointer Fire. Range Transmitting.

The rate having been established by the instrument described in the previous paragraph, it is set on the range transmitter for transmission to the battery. The transmitting system for range is the same in principle as the transmitting in train as far as electric motors are concerned. The ranges were received at each gun on two dials, one the approximate setting driven by the so-called "Rough" motor, while the smaller dial shows the exact setting driven by the "Fine" motor. The range-transmitting device has a large circular dial in the lower right-hand corner which indicates the rate set on the clock. The cylinder just above indicates the actual range being transmitted to the gun. Provision is made for applying the spotter's corrections. A special scale on the right-hand side of the apparatus indicates the exact amount of the correction which has been applied to the range-finder range. On the left-hand side of this apparatus

are the repeat-back receivers, which show whether or not sights have been set properly. This gives a continuous sight-setting at the guns. When the sights of all guns have been properly set these pointers all point toward the same reading, and a glance at the instrument is sufficient to ascertain whether or not sights have been properly set. These pointers are operated by motors directly from the sight scale.

One of these combined range transmitters and range clocks is located in each control station and in central (plot). In this manner the gunnery officer or the officer controlling the fire can control the rate which is set on the range clock, and he also decides whether or not the spotter's correction received from aloft shall be applied. The repeat-back indicator on the instrument indicates to him the accuracy with which the sight setters are following.

In the range receiver the counterpointer on the outer circumference of the dial is mechanically connected with the sight bar. The sight is then set in such manner that the mechanically driven counterpointer keeps the electric pointer constantly covered. In case it is desired to introduce a correction at the guns for erosion (opinion in the German Navy as to the necessity for this correction will be discussed under separate report), a special groove cylinder with a small traveler in a grooved slot is directly connected to the instrument and corrects at the guns for error due to erosion. The mechanical and electrical means for correcting for this erosion is similar to that used in our Navy. The principal difference is that before such a cylinder is introduced the gun in question is sent to Krupp's proving ground, where a few shots are fired and the cylinder with the proper grooves for the actual loss in muzzle velocity is made. In case the current is off, the range transmission operating the range transmitter and range receiver, a shutter with the label "Stromlos" shows that the dial is not working.

Salvo Gongs and Cease-Fire Lights.

The type of salvo gong controller and cease-fire light device for the main and secondary batteries. The device is so arranged that the gongs for firing may be rung simultaneously at each gun by moving the lever or switch. In case it is desired to fire ranging shots from a single gun, the gong may be rung separately at any desired individual gun or turret by moving the lever or switch for the particular gun or turret in question. These levers or switches are shown at the right of the instrument, one for each gun or turret. The salvo gong controller for the secondary battery is for seven guns. The controller for the main battery is for six turrets. The small lever or switch marked "Halt," controls the blue lights at each gun, which are the cease-firing signals.

These devices are located in each control station and in the central station (plot). The duration of the salvo gong can be controlled by the gunnery officer, and as a general rule the gongs are rung for about two seconds' duration.

Director Fire.

A further development of the range transmission system was styled by the Germans "Indirect feur," which is practically what we call "director fire." This they accomplished by the installation of an apparatus known as the "Richt-Gerate," or simply as the "R. G." This device may be termed a combined director scope and target-bearing transmitter, since the control of the battery in train is combined with the director scope in one instrument. One of these instruments was located in each control station.

The optical arrangement of this device has three binocular sights or object lenses, as follows: One for the trainer, who keeps the vertical wire on the target; one for the pointer, who keeps the horizontal wire of his director-scope lens or mirror on the target and follows the roll of the ship; and the third is for the gunnery officer controlling the fire of the battery. The pointer does the firing. In the earliest instruments the movements of the mirror in angular elevation, i. e., about a horizontal axis, were read off on a special scale so that the director angle or correction could be applied directly to the range transmitter. In this case the range transmitter and clock (combined instrument) was fitted with a special scale graduated in degrees and minutes of arc, and the proper elevation was applied directly to the elevating rack of the guns, instead of to the sight as was the case with pointer fire. The motors operating the system were the same as before, consisting of a "Rough" and "Fine" motor for accurate setting to insure accuracy of gun laying. (A later improvement of this system consisted of carrying the angular movements of the mirror directly to the range clock and range transmitter and controlling the guns by motors. This system will be described later.) The firing circuit is not closed in the usual way by a master key. It is fitted with a mouthpiece into which the pointer at the "R. G." can blow with his mouth when it is desired to fire. He carries the mouthpiece in his mouth while operating the device. When the pointer blows into the mouthpiece a relay is operated and the circuit closed, this being the master switch for the salvo fire. It was stated by Germany Navy officers and private concerns that much experimentation with various types of closing the firing circuit by hand, by foot, by knee, had been conducted, and that finally the results of many experiments developed that the reaction was quicker when a man closed a contact by blowing than when it was closed by

any other means. They considered that in this manner the "lag" due to the personal error of the director-scope is reduced to a minimum.

The base of the instrument is the same as the "R. W." in that it contains transmitting motors for the target-bearing receivers. It also contains the dials showing the train of the controlling "R. G." when the control of the fire is at another station. It also contains the mechanical and electrical means for correcting for parallax for guns, searchlights, and range finders. The range dial in the form of a cylinder is for the setting of the approximate range in order that the parallax may be properly corrected in the base of the apparatus. As the instruments were located at a height much greater than the battery, it was unnecessary to correct for the parallax in elevation, but such a correction was made in those "R. G." devices, which were located in the fore top.

At the right of the base of the instrument is the container for the special pendulum, fitted inside to correct for the "trunnion tilt," due to the combined roll and pitch of the vessel. This pendulum was especially designed after experimentation to be practically "dead-beat" and the friction of the pivot was reduced to a minimum in order to prevent "lag" and to insure accuracy. It was found in experimental firing, however, that on the German battleships and battle cruisers the error due to trunnion tilt was so small that they considered this correction was unnecessary. (In reply to inquiries as to the state of the weather and motion of the ship and locality in which such experimental firing was conducted, it was stated that the firing was conducted both in the Baltic Sea and in the North Sea with a moderate sea and the motion of the ship was that normally resulting from a moderate sea.) It was very important, however, that the submarines and destroyers should have some means of correcting this error. In the submarines a small "dead-beat" pendulum was used, which permitted firing at the same point of the roll. This, of course, resulted in a constant error from this source.

The deflection correction is set on the "R. G." in the same manner as on the "R. W."

The receivers at the guns are graduated directly in degrees and minutes of arc and are read off on two dials, "Rough" and "Fine." As is the case with pointer fire the counterpointers on the outer circumference of the dials are attached directly to the elevating racks of the guns by a special mechanical gearing which insures accuracy and prevents lost motion. The gun lager then keeps the two pointers constantly in conjunction with each other. The repeat back motors and pointers indicate to the gunnery officer that the battery is properly laid at all times when it is desired to fire.

Distant Central Electric Control of Elevation of Guns.

An improved method in the German system of laying the guns was under experimentation for several years prior to 1918. In 1918 this system was so far perfected that experimental firing was carried out on board H. M. S. *Karlsrhue* with the 6-inch guns. This was accomplished without any radical change in the system and merely by the addition of the elevation motors at the guns and the necessary relays to operate them. This method provided for direct operation of the elevation of the guns by electrical motors in the immediate vicinity of the guns. These motors operated electrically from a distant central-control station. In this method of firing, the directorscope and the target-bearing transmitter are combined in one instrument (one of these instruments manufactured by Carl Zeiss has been forwarded to the United States for test by the Navy Department, having been purchased by Bausch & Lomb. This instrument did not contain the mechanical and electrical arrangements for the distant central electrical control of the elevation of the guns, as it was not desired by the Germans to sell that device at that time. A system containing this device is the latest and most improved type of the instrument).

In this combined transmitter and directorscope, three observers have separate binocular object lenses for observation of the target, namely, the trainer, the pointer, and the officer controlling the fire. The trainer and the officer controlling the fire have the same functions as heretofore described. The pointer operates the directorscope mirror, which in this case is movable about a horizontal axis within the directorscope. When the pointer moves this mirror about the horizontal axis, in order to keep the horizontal wire of his mirror on or near the horizon as the ship rolls, all guns of the battery which are ready for firing are elevated or depressed automatically by means of connections between the mirror and the electrical motors installed at the guns. This enables the guns to be simultaneously and automatically elevated or moved through the same angle of elevation as the mirror. The movement of the mirrors or the "R. G." are carried over automatically to the guns as described in the subsequent paragraphs.

The arrangement for the control of the battery in train with the target-bearing indicators is the same as before described by the "R. G." The repeat-back system is carried out in the same manner as before, so that the gunnery officer can see whether or not the battery is following properly. Arrangements are made so that any individual gun may be cut out of the system by means of a switch and returned to the loading position. If any gun in the battery is not following in perfect synchronism (due to loading or other

causes), the firing circuit in that particular gun is automatically broken.

The relays which operate the electrical elevation motors at the guns are controlled with the same system of "Rough" and "Fine" motors in general use in the old system.

The attached blue prints show the same system for the secondary battery. In the case of the main battery guns the elevation motors are replaced by electromagnets, which operate directly on the control levers of the hydraulic elevating mechanism. (It is stated that the results of the preliminary test showed that this problem was easier and that better results could be obtained than with the secondary battery.)

The other devices in this system, such as range-averaging instruments, rate-of-change projector, salvo gongs, device for closing master firing circuit, and others, all remain the same as previously described by the older system.

In the general arrangement for the distant central electrical control of the elevation of the guns the electrical range clock gives both the range or angular elevation and the rate of change of range, having had the rate of change set on it, transmits through the gearing "B" to the vertical cylinder "C" the angular elevation for the proper range. Cylinder "C" has a spiral groove, which transmits the same angular motion through the mechanism "X" to the vertical rack "Y," which again transmits through gearings "E" and "T" the angular elevation to the range transmitter "H." (The range transmitters being both "Rough" and "Fine," the angular elevation thus transmitted from the range clock to the range transmitters "H" as described is that corresponding to the predicted range; that is, that determined from the average range of all the range finders connected to the average instrument and with the rate of change applied.) The combined directorscope and target bearing transmitter "Z" has at the top the mirror "L," containing the horizontal wire. The angular elevation or movement of this mirror "L" is transmitted through the vertical rod "R" through the mechanical gearing "M" to the "Rough" and "Fine" electrical angle of elevation transmitters "N" to the "Rough" and "Fine" electrical receivers "K," thence by means of mechanical gearing "S" to the "Rough" and "Fine" range transmitters "H." The angular elevations due to the range transmitted primarily from the range clock "A" through the gearing "T," and that due to the angular elevation of the mirror "L" finally through the gearing "S" is combined in the gearings "S" and "T" (that due to the mirror being superimposed upon that due to the range) and accordingly affects the angular elevation transmitters "H." "F" is a scale on which the spot

may be applied by the handwheel "O" through the gearing "I." The combined angular elevation due to the range modified by that due to the spot applied at "F" and further affected by that due to the angular elevation of the mirror is transmitted electrically by the angular elevation transmitters "H" through the wiring "G" to the "Rough" and "Fine" angular elevation receivers "P," which are installed at the guns. "Q" (the "Krontrollgeber") is an electrical transmitter for repeating back the correct angle elevation to the electrical angular elevation receivers "J," which are installed in the control stations.

The upper part, that is, the optical part of the combined director-scope and target-bearing transmitter "Z," which is shown on the drawing, is the same as the optical instrument manufactured by Carl Zeiss, which was recently sent to the States for test by the Navy Department. (This instrument was delivered to Bausch & Lomb, who contracted for it.) The optical instrument sent to the States was not the latest type of this instrument, however. It was not fitted with the vertical rod "R" nor the transmission gearing "M" for the distant central electrical control of the elevation of the guns. It was fitted with three sets of objective lenses, and it is understood could be modified the same as the instrument "Z."

In the experimental firing on the "*Karlsrhue*" the motors at the guns were rated at one horsepower and one-quarter horsepower for the "Rough" and "Fine" motors, respectively. The relays were controlled by the small Siemens synchronous "A. C." motors of the same type as those used throughout the whole fire control system operating on 50-cycle "A. C." with effective voltage of about 50-volt E. M. F. The elevating motors attached to the elevating rack were energized by D. C. 220 volts, and were of a special type so that a very heavy braking action was brought into play as soon as the motor was in its synchronous setting to avoid running past the proper setting. The operating of the motors was then as follows:

As the small A. C. receiving motors operated the relay, the rough or "heavy" motor started to turn and turned until the gun was very close to the proper setting. When this point was reached the heavy motor was electrically braked and the "Fine" motor started to turn, and turned until the synchronous setting was reached. Any further movement of the small A. C. "Rough" motor released the electrical brake and caused the motors to follow. While there was some "lag" between the guns and the mirror of the "R. G." when the angular velocity of the roll was very great, this amounted to a very small angle (or amount) at normal ranges and still less at great battle ranges. In order to overcome this entirely, however, it was controlled in the following manner:

The pointer at the "R. G." followed the target throughout the up roll by keeping the horizontal wire of the mirror on the target point of aim, the guns following this movement of the mirror with a slight "lag" in case the velocity of roll was great. When the top of the roll had been reached, the "R. G." pointer held the mirror stationary to give the battery time to run into synchronous position. A small horizontal line was engraved on the lens of the mirror subtending an angle of 4 feet of arc just below the horizontal cross wire. The master firing circuit was closed when the target reached the small horizontal line, by which time the battery had had sufficient time to run into perfect synchronism. If any gun is not in perfect synchronism, the firing circuit at that gun will not close. The gun automatically returns to the loading position as soon as the switch is opened after firing and resumes immediately its synchronous position as soon as the switch at the gun is closed. The system is so arranged that the firing circuit is automatically broken until the gun is properly laid. The system is further arranged in such manner that each individual gun may be cut out of the system by turning a switch. The experimental firing tests of this system on the 6-inch battery of the *Karlsrhue* in the spring of 1918 were considered by a special observing board to be highly satisfactory in every respect. It was stated and verified by statements from several sources that the dispersion was that which corresponded to the ballistical data for that range. The experimental firing of the *Karlsruhe* was at a range of 13,000 yards in rough weather. Properly trained operators had no difficulty in following the horizon with the mirror. It was entirely practicable to elevate the guns as rapidly as the ship rolled.

As a result of these tests the German admiralty immediately ordered 12 sets for 12 cruisers, and additional sets for the destroyer flotilla leaders. In the meantime experimental tests for the installation of the main battery were being proceeded with on the *Derflinger*. After the firing tests of the *Karlsrhue* just referred to and the report of the board thereon was received, the German admiralty made every effort to rush the completion of the *Derflinger's* installation and firing tests. This experimental work in the case of the *Derflinger* was not quite completed at the time of the armistice. It was stated, however, that the control of the main battery by this method was easier than that of the secondary battery. (In this connection it should be remembered that in the case of the main battery controlling gun motors are replaced by electromagnets which operate the elevating levers of the hydraulic elevating gear.)

The provisions of the peace treaty have prevented the completion of the main battery installation. German naval officers not associated with the disposal of the instruments concerned in this installation were very emphatic in their statements that the installation on the

Derflinger had passed the experimental stage. Only the official trials and report of the board were awaited before placing the order for the manufacture of the apparatus for the main batteries of the capital ships.

It was stated also that the supervision of the British naval officers of the control commission is so close that the Germans dared not proceed with the completion of the main battery installation for fear the British will learn of this development.

The experimental development and firings with this installation was considered so important in the German navy that very few German naval officers were cognizant of it even after the experimental firing had been conducted. At the time of the revolution in the German navy the few German naval officers responsible for the development of this apparatus destroyed the instruments on the *Karlsrhue* and the *Derflinger* and those that were under manufacture.

Special Features of German Fire-Control System.

The fire-control system was installed with a view to securing ruggedness to withstand all of the demands of battle without the occurrence of electrical failures, due to light construction and to lack of attention to the small details, such as contacts, water-tightness, etc., which is so important in electrical apparatus.

The special type of cable, which appears to be leaded and armored, was used and so arranged that the cable could be severed under water without affecting the operation or the accuracy of the system. All switches are protected from the effects of salt water. These switches are of rotary design and are completely inclosed by a water-tight cover over each of the sections of the switchboard, the switches being thrown from one position to another by water-tight levers or switch handles fitted with water-tight stuffing boxes.

Whenever any instrument or set of instruments was disabled in battle from any cause particularly, that local part of the system is automatically cut out and does not affect the operation of the remainder of the system.

The target-bearing transmission instruments are mounted in such manner that no amount of vibration affects the operation of the transmitters and receivers. In fact, it is stated that a small amount of vibration is really beneficial. None of the instruments in the fire-control station are mounted on the barbettes or armor. They are all mounted on separate vertical mountings extending up from the deck. In the battle of Jutland control stations were repeatedly struck by 15-inch shell without in any way damaging the system.

The efficiency of the system was clearly demonstrated in the battle of Jutland. Every ship reported that no failure to the fire-con-

trol system had occurred. The only damage resulted from direct hits which did not interfere with the perfect operation of the rest of the system.

Special consideration was given to the method of making joints in the cable (if I am not mistaken, attention has been invited to this point in previous reports submitted just after the Armistice with reference to both German and Austrian ships), and the construction of the fuses and the clips, and in the method of installing the motors.

Torpedo directors were installed in the conning tower (for the ship control), and also in the central station (plot).

Proposed Improvements.

The following devices have passed the experimental stage but have not as yet been tried out by the German admiralty and adopted for installation: A gyroscopic connection between the "R. G." and a special gyroscope compass to determine the rate at which the target bearing is changing, so that in event of the target becoming obscured from all controlling stations the bearing may be maintained for some period of time longer. The device is said to be simple in construction.

A device for correcting the rate during the time of flight of the shell. This is to be used in conjunction with the clocks and gongs for announcing the fall of the salvo.

A special apparatus for determination of the deflection and for the automatic application of it.

General Discussion.

It will be noted that there is an absence of graphical representation or so-called plotting in the German fire-control system. There is only one "Anschutz" plotting board in the central station (plot), which was used for torpedo fire only, not for determining the rate. The Germans consider that any system of plotting graphically is too slow for determining the rate of change in battle. They stated that the British system of plotting used in the battle of Jutland was so slow that they were always just a little behind, that as soon as the British were able to give the rate of change it was immediately apparent to the Germans, and that invariably when this occcurred they altered course immediately, thereby avoiding hits. They considered this more than any other factor was responsible for the fact that practically 50 per cent of their ships sustained almost no hits. The Germans stated that their method of obtaining the rate is the only one they have found from experience is fast enough to *keep* on the target in battle.

Throughout all the discussions of the German fire-control system it strikes one with emphasis that the use of the stereoscopic range

finder is a fundamental factor which is intimately related to the entire system. Innumerable references are made to the ease and accuracy with which they can measure the range with these range finders, particularly under battle conditions. It is stated that they can measure the range accurately with the stereoscopic range finders from the flash of the guns or the splashes due to the landing of a salvo, or from funnel smoke. In the battle of Jutland they were able to use the British gun flashes for determining a point of aim and for measuring accurately the range. One of the ablest German gunnery officers said that in the battle his second salvo straddled. He said that just prior to opening fire with their first salvo his range finders were measuring the range constantly, and that as soon as their first salvo landed the stereoscopic range finders measured the splash and determined the proper spot for him. He considered this not only a verification of the spotter's estimate but used it in preference to the spotter's estimate, stating that there was no use in taking a spotter's estimate when he could measure it accurately. He said he immediately applied as a spotter's correction the difference between the range just before the salvo and the range measured from the splash of the first salvo and obtained the hitting range accurately, his second salvo straddling the target. The sincerity and emphasis with which such statements are made by German officers of recognized ability and enviable reputation in battle impress one not only with the desirability but with the necessity of thorough investigation of the stereoscopic range finders by us at the earliest practical date.

Further advantages claimed for the stereoscopic range finders are inability to be thrown out of adjustment due to shock from gun fire or similar causes, less interference from vibration (ability to take ranges accurately within five seconds after main battery salvo), and much greater accuracy in low visibility conditions.

There need be no doubt in our minds as to reliable German opinion of the value of stereoscopic range finders when we bear in mind that upon this efficiency depends the rate of change of rate as determined by them.

In the German system there is no provision for controlling the fire of the main battery from the after top. This necessitates installation of a special after fire-control tower similar to the forward fire-control tower, the only difference being less armor protection for the after tower. The personnel in the plotting room of the main battery consists of 2 officers and 11 men, and in that of the secondary battery of 1 officer and 12 men. These 2 plotting rooms are separate, but alongside of each other. Although the commissioned and enlisted personnel in the German plotting rooms is smaller than in our service, this is accounted for by the fact that in the German system

various activities are placed in the control stations which in our system are in the plotting room. This results in an increased personnel at the control stations. It appears that the strength of the commissioned and enlisted personnel in the fire-control division is nearly equal in both systems. In the German system a considerably greater concentration of the actual control of the fire by the gunnery officer personally takes place. Normally he observes the fall of every salvo fire from the main battery. Any modification of the "rate" of change of range or of the application of a spot must be referred to him and he alone decides whether or not it shall be applied.

The application of the spot is made at the controlling director instead of in the plotting room.

The application of the correction for horizontal parallax of all the turrets is made in the base of the controlling director by mechanical gearing.

The application of the deflection spot is made at the controlling director instead of in the plotting room. The salvo is fired by closing the master firing circuit by means of blowing with the mouth into a mouthpiece, thus closing a relay in the electric circuit. The combined directorscope and target-bearing transmitter is the best optical instrument which I have seen. Further comment on it will not be made, as one has been sent to Bausch & Lomb in the United States, though it is not of the latest design. No roller path was used in the German turrets owing to the improved method of complete turret assembly at Krupp's. In this assembly the plane horizontal surface is tested by a board of officers before the turret is passed or accepted. There are special construction features of the turret roller path which appear very ingenious. It is assumed that information in this connection was obtained from the "Ostfriesland."

Erosion correctors were not used at the guns except in isolated or unusual circumstances. The Germans state that the performance of different guns is such as to preclude any practical gain in efficiency from erosion correctors and that therefore they have abandoned them. At the end of the war their procedure when they found excessive erosion after more than 50 shots of large caliber guns consisted in sending for a Krupp's representative, who determined whether it was necessary to send the gun to Krupp's for ranging. After the gun was sent to Krupp's and fire erosion correctors were made corresponding to the proper reduced muzzle velocity. Further information will be furnished in this connection under a separate report of a visit to Krupp's at Essen. In such cases and wherever possible information was verified from other sources.

In the German system it is to be noted that there are three training receivers in each turret, that is, three in addition to the range-finder receiver, which is separate.

In the German system it is necessary for the turret officer to continually observe whether his turret is following in train, no repeat-back arrangements being provided. In the American system provision for repeating back is installed, the plotting room and the controlling fire-control station both thus having the opportunity to check the train of all turrets. In the German system it is distributed, throwing additional duties on the four turret officers and giving no central check.

Provision for water-tightness of all instruments and switchboards in the central station (plot) deserves special consideration. All instruments are entirely water-tight, which is not the case in our system, particularly with reference to the switchboards. In this connection it is worthy of mention that in the battle of Jutland the battleship *Koenig* during the battle had her plotting room completely flooded. Before the personnel left the plotting room all switches were thrown in position for control of the entire main battery from the forward fire-control tower. The fire-control officer was able to continue without the slightest difficulty the control of the entire main battery throughout the remainder of the action, which was over an hour. During this period the entire fire control system operated efficiently, although the plotting room had been abandoned by all personnel. In this particular connection we may note that there are times when it is of advantage not to concentrate too much of the brains of the fire-control system in the plotting room.

During the battle of Jutland the gases from exploded shell passed through the voice tubes and necessitated the evacuation of some of the control stations. In the later German ships the voice tubes were omitted entirely and a duplicate set of telephones was installed to take their place. In some of the older ships the voice tubes were not removed but were fitted with special coverings to exclude the passage of gas, but these coverings did not accomplish their object.

Advantages and Disadvantages of German Fire-Control System.

In view of the exceptional precautions taken by the Bureau of Ordnance to insure secrecy concerning the proposed fire-control installation for use in the new capital ships, I do not feel at liberty to set forth herein a general comparison of the German and the American fire-control systems. It is considered that the German system has sufficient advantages to deserve our most serious and immediate consideration. It is respectfully suggested, in view of the inadvisability of making a detailed comparison in this report, that a board of several officers in the United States should make such comparison.

Attention is again invited to the fact that the report which will be submitted on the "A. G." (gyro) device should be considered in

connection with this report, or supplementary to it. There are several features in connection with the "A. G." device which deserve special attention.

Among the disadvantages of the German fire-control system may be noted the following:

(*a*) The necessity for two parallel systems ("Rough" and "Fine") throughout the entire transmission systems, both elevation and train, instead of one.

(*b*) There is no "repeat-back" system in the target bearing system for train.

(*c*) There is no auxiliary method of determining the "rate" of change of range. (Apparently less difficulty is experienced in keeping the rate when using stereoscopic range finders.)

(*d*) No fire-control station established in the main top necessitating an additional armored fire-control station aft.

(*e*) No specially designed torpedo plotting room. (It was stated that this was located in different parts of the ship in different ships.)

(*f*) No torpedo control or observing station aloft.

(*g*) No adequate provision for controlling the fire of main battery or any group of turrets from a single turret.

Among the more important advantages may be mentioned:

(*a*) Distant central electrical control of the elevation of the guns.

(*b*) Certain features in connection with the "A. G." device, which will be described in a supplementary report.

(*c*) Use of stereoscopic range finders.

(*d*) Superior arrangements for insuring water-tight integrity of all instruments and switchboards.

(*e*) A faster method of determining the "rate" of change of range.

(*f*) Superior optical instruments.

(*g*) Avoidance of necessity for graphically determining the rate.

(*h*) The fire control officer has a more direct control of the fire (without handicapping him with too many details).

(*i*) Ruggedness of system (ability of instruments as mounted to withstand shock).

(*j*) Ingenious manner of closing master firing circuit.

It will be apparent to officers who are familiar with the latest developments of American fire-control installation that there are advantages common to both German and American systems which are not mentioned in this report for reasons which should be apparent. Two examples of such advantages are: (1) synchronous systems throughout; and (2) disablement of any part of the system above the protective deck does not affect the rest of the system.

GERMAN ORDNANCE-FIRE CONTROL (THE "A G." DEVICE).

Source: Reliable.

The "A. G." Device (Gyro).

The fundamental principle and idea of the so-called "A. G." device was the invention originally of an Austrian named Von Petrovic. The firm of Krupp bought the patent rights from Petrovic and through some years of experimentation they have considerably improved the instrument. Petrovic took out patent rights in the United States—patent No. 1,032,022, of 9 July, 1912, for the basic patent. Since then Krupp has made 22 applications in the United States for patents covering certain modifications and improvements.

The basic principle of the "A. G." device is a gyro for maintaining a horizontal reference plane.

Considerable difficulty has been experienced in obtaining sufficient reliable information in connection with the "A. G." device to permit of an intelligent report upon it. The experimentation was carried out largely by Krupp, who expended a considerable amount of money in developing it in the twelve years since they bought the basic patent from Petrovic. As it had just passed the experimental stage at the time of the armistice, Krupp has been unable to realize any return upon their investment. They are, therefore, very anxious to sell this invention. It appears, however, that the German Admiralty is equally anxious to prevent its sale, although they will not admit this.

The information furnished in this report was obtained from three sources and had to be pieced together to give any intelligent idea of what the device is or what it accomplishes. The German admiralty considered this as one of the two most secret and progressive developments in their gunnery in recent years, the other being the distant central electrical control of elevation of the guns. Every page of the books published concerning the description, experimentation, and results accomplished in these two different apparatus is marked "VERY SECRET." These two inventions are the ones in which we are most interested, as they are considered to represent a decided advance in naval gunnery. In order to obtain any description of the apparatus it was necessary to go to Krupp at Essen, Germany. Before going to Essen I desired to get some idea of what results had been obtained with the device from actual firings at sea on naval vessels. All of these tests were conducted by the German Admiralty.

The admiralty were very reluctant at all times to furnish any information concerning these tests and the results obtained, and at first refused to give any information whatsoever. It was finally

arranged to use Krupp as a leverage for acquiring the desired information by bringing pressure to bear on the admiralty, which was done. Several conferences with the officer in charge of the German fire control at the admiralty resulted. This officer appears to be exceptionally bright and well informed. The officers remaining in the German Admiralty apparently have been picked for their exceptional ability, and perhaps because of affiliation more or less with certain political parties. This particular officer was the gunnery officer of the battle cruiser *Lutzow* during the battle of Jutland, and in the latter part of the war of the battleship *Baden*. As the conferences with the officer continued and relations with him reached a more satisfactory status (particularly personal relations), he appeared interested and more willing to impart some information. This officer (and two of equal standing, who were consulted individually and separately), spoke of the "A. G." device in terms of the highest praise, stating they considered it produced entirely satisfactory results. Data concerning these tests will be given later in this report.

The German Admiralty was unwilling to furnish a copy of the confidential book containing the reports of the boards which conducted the experimental tests of this device in 1910, 1911, 1912. However, we had access to certain limited parts of the book for a few hours. Experimental work with this device covered a period of 12 years. Sufficient progress had been made by 1910 to provide an experimental installation on one vessel.

From the limited amount of information which I was able to obtain during the first part of my investigation I formed the opinion that the development of this device had not progressed to a point where it was of much practical value. However, the more one pursued investigations, and among different sources of information, it was necessary to alter this opinion, particularly with reference to certain features of the device. Although my first conversations with the Germans in connection with this device conveyed the impression that they had been unsuccessful in developing any type of central gyro, I had been of the opinion from the start, after familiarizing myself with their degree of progress along similar lines in fire control, that they must have investigated thoroughly a central gyro also. By persistent inquiries with reference to the "A. G." device at each gun it was developed that they were successful in perfecting an arrangement for correcting for precession of the gyro even in such unfavorable circumstances as having the target and the horizon both obscured. In my interviews with the German naval officers, which took place prior to my visit to Krupp at Essen, in reply to an inquiry as to whether this was accomplished by a comparison of a repeater from a central gyro, which was corrected upon the horizon on the disengaged side, it was stated that this was not the case. (It is interest-

ing to note that information as to how it was done was not volunteered and could not be obtained from this source. It was later obtained from Krupp as will be indicated.) One gained the opinion from a discussion that some automatic arrangements had been invented which, when the precession amounted to a certain extent in one direction the gyro was automatically caused to precess in the opposite direction. This officer stated that their experience developed that gyros precessed differently with different individual instruments, and that as a general indication, however, they considered it necessary to correct the precession of a gyro at about 5-minute intervals at least. A 10-minute interval would introduce very appreciable errors.

The underlying principle of the device has remained the same since 1910, but since 1912 six different modifications of the installation have been made, each said to be more progressive. The "A. G." device had been installed on two battleships, the *Hindenburg*, which was the experimental ship for that purpose, and one other vessel. Experimental work had been completed, and at the time of the Armistice complete sets of these instruments were under manufacture for all capital ships.

The Germans experimented with a gyro device for maintaining a horizontal reference plane with gyros located in the plotting room, in the foretop, and at the individual guns. The development of the system herein described commenced with a gyro installed at each main battery gun. Certain modificatoins of this installation were made later, which will be described. The gyro at each gun maintains a horizontal plane and is fitted with a pointer which can be set to correspond to the proper angle of elevation for any given range. This pointer is fitted with one of the contacts of the firing circuit. Connected to the gun is a fixed pointer which carries the other contact of the firing circuit. The closing of the firing circuit is effected by the closing of the electrical contacts at the instant the mechanical contacts, or, as here called, fixed pointers, actually pass each other. The wiping of the mechanical wiping contacts or pointers does not close the firing circuit. The electrical contacts are closed at that instant. This will be described later.

The individual "A. G." instrument at each gun draws its current from a central source, but there is a separate gyro run by this current at each gun which is contained in the water-tight casing. This water-tight casing is particularly necessary in the case of secondary battery guns. Variation in the voltage has no appreciable effect on the action of the instrument. The variation of 20 per cent in the E. M. F. in the circuit produces practically no error unless the varia-

tion continues for an appreciable time. If there is a constant drop in the voltage, the error is so small that it may be disregarded.

The gyro itself carries one fixed contact. The water-tight casing of the gyro also carries a fixed contact. These so-called "contacts" are not contacts in the true sense of the word. They might better be termed "indicators" or "pointers." (We will call them here "mechanical wiping contacts"). When these two pointers are exactly opposite each other, the firing circuit at that gun is closed. The closing of the circuit takes place not at the mechanical wiping contacts but at two electrical contacts, one of which is fixed to the "A. G." casing. Much difficulty was experienced with an electrical wiping contact, the difficulties being the same that certain British and American systems have encountered. The Germans, therefore, simply use this as a mechanical wiping contact and "close" the circuit through electrical contacts, which are larger in area and through which a much stronger current can be sent. There is a special automatic device (probably electrical) installed in connection with the closing of these electrical contacts which takes care of the "firing interval" (the interval from the instant the operator mechanically closes the firing circuit to the instant the salvo is actually fired). The error or variation in range or dispersion due to this interval necessarily is a function of the *speed of the roll of the ship*. In connection with the closing of the electrical contacts of the firing circuit at the gun, a device (probably electrical) takes care of the speed of the roll for the firing interval, thus actually firing the gun when the two mechanical wiping contacts actually pass each other. The exact nature of this device, of course, was not divulged, and it is undoubtedly largely due to it that the Germans have reduced their dispersion. Apparently there is some sort of electrical arrangement and offset angle for closing the circuit a little bit in advance in order to provide for the firing interval. The amount of this offset varies with the speed of the roll of the ship. The water-tight casing of the gyro is conected to the sight bar. When the sight is elevated through an angle, the fixed contact on the "A. G." casing is moved through the same angle. At the same time the so-called fixed contact or pointer on the casing also moves through the same angle.

There is a very rough sketch appended which may give some slight idea of the arrangement. It is considered that the results obtained with the "A. G." device are in a large measure due to a special device which anticipates or corrects for the firing interval and the speed of the roll.

Assuming the device satisfactorily accomplishes this object, which appears to be borne out by the results of the official test which will be quoted later in this report, it deserves our immediate and most earnest consideration.

In all of the experimental work of the Germans in connection with gyro devices, they state they have never been able to obtain a gyro which did not "precess." They have two methods for correcting the precession of gyros, but in each case there must be one reference line, such as the horizon, and it is necessary to actually see the horizon. One method consisted in mounting a telescope or pointer sight at each individual gyro. An observer could then look through the telescope and see whether or not the gyro was off, due to precession. There was a small magnetic control of the precession operated by hand by the observer to make the gyro precess in the opposite direction. The Germans found it necessary to make such correction every few minutes. This arrangement not only required a considerable number of additional observers, but it was rendered very difficult in the case of the turret guns. In the latest development of the "A. G." device the precession of the individual gyros at the guns was corrected automatically from what we may term a master gyro in the foretop. Actually it is not a master gyro, because the individual gyros at the guns were not "repeaters." These gyros at the guns were similar to the gyro in the foretop. The "master" gyro in the foretop was the only one fitted with a telescope and it was kept corrected for precession continuously. The observer at the master gyro could keep this gyro corrected for precession on the horizon, on the disengaged side, or any part of the horizon which might be in sight. Each individual gyro at the guns was fitted with a magnetic control of the precession of the individual gyro, this magnetic control being operated electrically from the master gyro in the foretop. By keeping this master gyro continuously corrected for precession, all gyros at the guns were automatically electrically corrected for precession.

It was only after much persistent inquiry that it was possible to ascertain that this arrangement existed. It was evident from a discussion that their experimentation must have resulted in some such arrangement or they would have been unable to accomplish the results which the reports of the official tests indicate. Two German naval officers stated that there was no such arrangement and were emphatic in their assertions that no central or distant means of correcting the precession of the individual gyros at the guns existed. It was apparent, however, that they were very reluctant to discuss the entire subject. The officer at the German Admiralty in charge of the fire control at the present time, in reply to inquiries about this particular phase of the subject, replied that he was not permitted to discuss anything about a central gyro. The only statements he was willing to make in this connection were that considerable experimentation had been conducted with central gyros located in different positions, and, in reply to inquiry, that it was his personal opinion that both the central gyro and one at each gun is the most advisable

arrangement. (I assume that he referred to the master gyro in the top which corrects for precession automatically the individual gyros at the guns. This may or may not have been what he had in mind.)

In using the "A. G." device the firing was always done with the roll in the same direction—on the up-roll. At the time the gunnery officer desires to fire a salvo he causes to be rung from the control station a gong which rings at each gun. This gong is the signal to elevate, and all pointers elevate the guns which fire as the contacts wipe. There is no break in the firing circuit, such as the master key, for use at the control stations. The decision of whether a gun is to fire or not is made at each individual gun by closing or opening the circuit locally. The pointer which is set at the prescribed angle from the horizontal reference plane of the gyro automatically transmits the proper setting of the angle of elevation to the control stations. In the method just described the fire-control officer desiring to fire the guns in salvo gives the order "through." The gongs are then rung and all guns elevate and fire when the contact is wiped.

In the other method the fire-control officer gives the order "fire." This is in the nature of a permission to fire. Each pointer can then close his circuit as soon as his gun is ready to fire, and as the ship rolls through the proper angle of elevation the guns fire. It would appear that this might result in a rippling salvo, but it was stated that this was not noticeable; that the guns fired practically simultaneously. In both these methods there is a constant "lag" due to the firing interval, and this lag has been corrected for in the instrument. It is therefore necessary to fire on the up roll always, as this lag has been corrected for only in one direction.

It should be borne in mind that primarily it is the *speed* of the roll for which the instrument corrects in one direction. The importance of not firing in the other direction is therefore apparent. The limits for efficient operation being between $\frac{3}{4}$ of a degree to 10 degrees per second-roll, it was stated that a roll having the velocity of less than $\frac{3}{4}$ of a degree per second introduced a slight error. This would prove that the error due to velocity of gun and firing interval must be automatically corrected by the apparatus. This is one of the features which the Germans apparently laid greatest stress upon as being largely responsible for their results in obtaining the reduction of dispersion.

The limits of efficient operation being from $\frac{3}{4}$ of a degree to 10 degrees roll per second, taking an average period of the ship, this corresponds to a roll on each side of 20 degrees. The apparatus can be used up to a roll of 30 degrees on each side.

The officer in charge of fire control at the German Admiralty, in reply to an inquiry, stated that he had been gunnery officer on the *Baden* up to the close of the war; that the "A. G." devices were fitted

to this vessel, and the crews were daily trained in the use of this apparatus. In the event of battle with the British fleet at this time, he would have unhesitatingly used the device throughout the battle in preference to any other method if there was any motion at all, and probably would have used it in the case of very calm weather. The opinion of this officer is worthy of the highest value. He is a man of exceptional ability, of fine character, and has received numerous decorations. Whenever inquiries were made of him concerning material, he either answered frankly or stated that he was not permitted to do so, as the inquiry was concerning matters considered confidential by the admiralty. The opinion of this officer relative to the value of the "A. G." device is supported by that of a German vice admiral who was director of naval ordnance during the war. An indication of the performance of duty of this officer is given by the statement of Krupp that he was the strictest officer they have ever had on duty there as inspector of ordnance. He appears to be very unpopular with Krupp, but is considered one of the best ordnance experts in the German Navy.

The vice admiral stated that the first ship to be completely equipped with this device was the battle cruiser *Lutzow*, where they were installed just before the battle of Jutland. Owing to the unfamiliarity of the personnel with this device, it was not used during the battle. After Jutland the *Hindenburg* and the *Baden* were also equipped with it, and the experimental firing showed very good results. This refers to the individual devices at each gun as well as at the turret guns. In reply to an inquiry regarding the central gyro firing device, this admiral stated that it had just completed the experimental stage and had not been installed on any vessel, and there were therefore no practical results on this type. In conclusion, the admiral stated, however, that a fleet equipped with these devices undoubtedly would be superior to a fleet not having them, other things being equal.

(It is interesting to note here that this vice admiral stated that the tests on the *Karlsrhue* in 1918 with the distant electric control of elevation of the guns developed by Siemens-Halske were a complete success. As a result of these tests installation was authorized for 12 other vessels of this class and for destroyer leaders. The admiral expressed himself well satisfied with the results and very much pleased with the development.

The results given in the following tables were conducted in 1910, 1911, and 1912 by the *Prinz Adelbert*, *Blucher*, and *Elsass*. At the time of these experiments director firing had not been installed in the German Navy. The comparative tests were made during 1910, 1911, and 1912 with these devices and with pointer fire. The apparatus was designed primarily to reduce the dispersion—that is, that

part of the dispersion due to the pointer. It may be noted that the greater the speed of the roll of the vessel the greater was the advantage of this system over pointer fire.

If we assume the operation of the individual "A. G." device at each gun to be efficient and more accurate than other existing intallations, it is apparent that the combination of this system with the distant central electrical control of elevation of the guns gives the fire-control officer, or his assistant actually controlling the fire, a much finer control of the fire in that he may take advantage of the roll of the ship to get off a salvo or to give the command "through." In fact, the necessity for the command "through" is eliminated in that case and the officer operating the mirror controlling the elevation of the guns could do this automatically, thus eliminating the delay in error due to giving the command "through" and to the ringing of the gongs. In other words, it centralizes the direct operation of the elevation of the battery and the firing of it in one person.

There follows a summary of the board's report made after trial on the *Prinz Adelbert*, *Blucher*, and *Alsass*. The apparatus operated without disturbance or breakdown during the trials, although these devices had been installed aboard ship for over one and one-half years and had been in constant use.

The following advantages are reported by the board as a result of tests:

(1) The apparatus gives a method of firing which reduces dispersion to very low limits, or practically eliminates errors of dispersion due to gun laying.

(2) The apparatus permits firing when target is obscured.

(3) The apparatus permits accurate firing when vessels is rolling.

(4) The apparatus permits firing in cases where the roll is so great as to absolutely prohibit pointer fire.

(5) The apparatus relieves the strain on the personnel.

(6) The apparatus permits easier service of the gun, as the gun does not have to be returned to loading position in cases where the ship is rolling through the firing angle.

The data contained in this report has just been received from the German Admiralty. It is a confidential report of the firing of the H. M. S. *Karlsrhue*, which took place in the summer of 1918 with the installation with the motors at the guns and using the R. G.; in other words, the distant central electrical control of the elevation of the guns. This data gives a comparison of this installation with the results obtained with pointer fire.

The tables given below of the firing in 1918 have been copied from the German Admiralty very secret book by an officer who reads German fluently:

Date.	Speed of ship.	Range.	Pointer fire dispersion (maximum).	Range table results 50 per cent.	Dispersion for single gun.	Quotient.	Actual mean dispersion.
5/24/17	22	108–92	123=2. 8/16°	91	77	0. 8	69. 1=1. 6/16°
5/24/17	20	126–89	198=5. 1/16°	114	78	1. 7	150 =3. 8/16°
		90	90=1. 9/16°	78	75	0. 7	50 =1. 0/16°
6/9/17	20	140–121	145=5. 4/16°	136	107	0. 8	97 =3. 6/16°
5/3/18	23	63	204=2. 8/16°	63	.....	1. 8	115 =1. 6/16°

WITH R. G.

Date.	Speed of ship.	Range.	Mean dispersion.	Range table results 50 per cent.	Dispersion for single gun.	Quotient.	Maximum dispersion.
1/21/17	22	119–113	153–4. 8°	97	104	1. 5	304= 9. 2
2/26/17	24	110–139	178–6. 4°	95	134	1. 3	308=11. 1
7/26/18	Anchored.	92	107–2. 3°	77	.....	1. 4	190= 4. 0
7/26/18	18.....	93	73–1. 6°	77	.....	1. 0	0= 2. 7
7/26/18	26.....	94	79–1. 6°	78	.....	1. 0	130= 2. 0

NOTE.—The foundations of the guns (platforms) ewre not solid and not properly lined up in one plane. 15. cm=6" guns/45 cal. shell—4.1 cal. long—IV=835 meters/sec.

Calibration practice later in 1918.

Quotient equals $\frac{\text{actual mean dispersion}}{\text{range table dispersion for single gun.}}$

With R. G. ship anchored (range 9,200 meters).

0. 7
1. 8
1. 6
1. 4 1. 4 average.

With R. G. speed 18 knots (range 9,300 meters). NOTE.—Movement of ship helps results.

0. 8
1. 6
0. 5
0. 7
0. 8
1. 5
0. 8 1. 0 average.

With R. G. speed 26 knots—range 9,400 meters.

1. 3
1. 2
0. 5
1. 0
0. 7
0. 7
0. 7
1. 7 1. 0 average.

N. B. Results were better with ship under way than at anchor.

H. M. S. *Karlsruhe.*—Motor elevation of guns using "R. G." Tests were to be conducted to determine functioning of system under following conditions, viz:

(1) With obscured target.
(2) With heavy roll.
(3) Increase in rapidity of fire.

(1) and (3) have been fully demonstrated; (2) not quite finally tried and completed.

I. *With quiet lying ship* (or nearly so) the following was proved:

(*a*) Greater fire rapidity—more hits per minute without detriment to accuracy.
(*b*) Central control of deflection and ranges—no individual errors.
(*c*) Central control of gun laying—if any errors exist they may be corrected.
(*d*) No loss of time in changing range and deflection and in salvo firing.
(*e*) The best pointer uses the apparatus and fires from R. G. The other gun pointers are only held in reserve and watch the functioning of the guns.
(*f*) Fewer reserve gun layers needed as reserve—less training.
(*g*) The battery is under better central control.

II. *With heavy rolling:*

(*a*) Accuracy of fire better than with pointer fire (all other advantages under "I."

III. *The quiet or rolling vessel:*

(*a*) No detrimental effects from spray and smoke.

Decision regarding results of 18 August, 1918—*Karlsruhe.*

Admiralty board report.

As a result of tests there is no question but that the R. G. may be declared "ready for service." The equipment on *Karlsruhe* was the first of this type and was not entirely perfect. Small defects existed, which, as a result of experience gained in these tests, can be avoided in future installations. It is essential that every effort be made to equip the fleet with these devices. The tests show that no comparison can be made between pointer fire and R. G. with ship lying quiet. The whole construction of the R. G. is built for heavy-rolling vessels, and shows certainly even battery results may be expected with heavy rolling.

Decision of German Admiralty (appended to report) October 15, 1918.

As a result of the good tests of firing shown in the above report, the same is approved. The R. G. is "ready for service" and is declared available for battle use without reservation.

The admiralty then ordered installations for 12 light cruisers and destroyer leaders.

The tests on *Derflinger* were not completed, but the admiralty states that the tests showed it was much easier to control the main battery in this manner than the secondary battery.

It is stated that the guns could be fired without the slightest difficulty under conditions where pointer fire was practically impossible. It will be noted that where the ship had a very slight roll in some cases the pointer fire was better. This is stated to have been due to the fact that the gun platforms were not sufficiently solid and also because director fire had not been fitted. The main point to be noted is that the results were very good under adverse conditions. The German Admiralty reports indicate that the system functioned properly. The calibration practice in 1918 in the late summer is reported to have gone off without a single hitch.

It appears that this apparatus has been developed beyond the experimental stage and is in condition for manufacture and installation.

It is considered that the adoption of the distant central electrical control of the elevation of the guns with certain features of the "A. G." device, reported upon in separate report of this date, would be a very decided advance in naval gunnery. These two features are those which it appears advisable to adopt from the German fire-control system, and it is recommended that they receive the immediate serious consideration of the department.

After visiting Krupp's and learning more of the "A. G." device, I informed Krupp's that in order for us to ascertain whether we were seriously interested in the device it would be necessary for them to obtain data concerning firings in 1917 or 1918 conducted by the admiralty. This I considered particularly desirable information to have in any event, whatever the decision of the department might be. There can be no doubt whatever as to the reliability of the data furnished. They are copied direct from the secret reports which are printed in book form. I was one of the two officers who assisted in copying the first three tables, those of the *Prinz Adelbert*, *Blucher*, and *Alsass*.

Since my visit to Essen the German Admiralty has furnished additional data, giving the results of the firings in 1917 with the "A. G." Owing to the discontinuance of the courier service between Berlin and London, it has been impossible to obtain these reports in time to include them in this report. It is considered advisable not to delay this report until they are received. When this data is received it will be included in a supplementary report, which will be forwarded without delay. It is estimated it should reach the department within 10 days after the receipt of this report.

Considering this report in connection with my report No. 00826 on German fire control, the two outstanding features of the entire German system are (1) certain features of the "A. G." device combined with (2) the distant central electrical control of the elevation of the guns. It is believed that use of the combination of these two features is a decided advance in the development of the science of naval gunnery. It is recommended that they receive the immediate serious consideration of the department.

With reference to the remainder of the German fire-control system, it is a system which has survived the test of battle. It is believed that the Japanese left to themselves would probably never develop any such system. The English electrical concerns are behind the Americans, and the Japanese are far behind the English. Some of the German instruments I have seen indicate that German electrical engineers are capable of producing material of the first order. If the navies of the world powers are to be limited by the conference, which is about to meet in Washington, it is all the more important to prevent such valuable information reaching the possession of probable enemies. Probably for the cost of one modern destroyer we could prevent all of the development of the German fire-control system from reaching either the British or the Japanese. The status of the development of German naval gunnery and fire control at the time of the battle of Jutland, as compared to the American and the British, appears sufficient justification, with the addition of the reports submitted, to believe that we can not afford to allow this system to go to another nation.

JAPANESE ACTIVITY IN GERMANY.

Source: Reliable.

The Japanese naval and military commission, which has been in Germany for the past two months, are conducting their operations along the following lines:

The Japanese military or naval attaché arranges with the German concerns for the inspection of drawings, plans, and, where possible, the actual material. The experts for these particular devices on the commission accompany the attaché and advise him on the technical qualities involved. In most cases the names of the experts on the commission are disguised, and the same Japanese officer has been reported by the Germans as traveling under several different names and aliases.

My informants state that in the majority of cases the Japanese are arranging for the purchase of the material without *test*, evidently going on the principle that even though some of the devices

purchased may be worthless there will still remain sufficiently valuable information to make this method pay.

The Japanese prefer to purchase patents and devices that can be manufactured by themselves without further assistance. When this is not possible they attempt to arrange for German technical assistance in Japan.

My informants state further that the Japanese military and naval attachés apparently have full power to conclude any necessary negotiations with the Germans, subject to the advice of the technical experts on the commission.

To date the principal German devices the Japanese have tried to acquire are the following:

Airplane material:
- Engines.
- Planes.
- Instruments.
- Armaments.

Diesel engines.
Submarine construction.
Mines.
Torpedoes.
Fire-control apparatus and system
Powder and explosives.
Gas—Chemical warfare.
Armor-piercing shell.
Fuses, delayed action and clock.

JAPANESE PRESS ATTITUDE PRIOR TO LIMITATION CONFERENCE.

[Osaka Mainichi, 20 September, 1921.]

In an article regarding the proposal of the Government to put two teachers in charge of three classes, with shorter hours, the paper says, trenchantly: "To take the boy from one hand and give him to another is good enough to please a baby but not a nation." It then contrasts the amounts spent for armament and education and concludes with the statement that no wonder Japan is the object of so much suspicion and world-wide misgivings.

[The Nagasaki Press, 21 October, 1921.]

The Washington conference will be unique in that every member has openly declared for selfish intentions. Everyone is going to the conference with an idea of getting as much as possible for their own country. The main arguments advanced in favor of disarmament are the financial benefit that will result. Altruism has been overworked, it is true, but that is no reason why it should be entirely abandoned at the coming conference. Any nation who sends its delegates with instructions to accept any scheme for limitation of armaments will at least deserve the Nobel prize, as well as the honor of reestablishing its self-respect.

[Count Soyeshima, October 22, "Japan will be relegated to second or third power if naval expansion is not curbed."]

Japan, in her long history of nearly 26 centuries, has never been confronted by an epoch-making period of greater significance than the present. Whether Japan can keep on her honorable position in the international intercourse,

ranking, as she does, on an equal footing of any of the great powers in the world, or whether she will be relegated to a second or third rate nation after an unforeseen calamity that may possibly result if she continues her naval expansion unrestrictedly, all depends upon the enthusiasm and determination in which Japan will attend the Pacific conference. Japan's fate really hinges upon the outcome of the conference.

Japan can not engage in an urestricted naval race. It is preposterous for a nation like Japan to spend so much on arms. She badly needs an enormous sum to enhance her educational system and to improve her industry and commerce. America's proposal to curtail armaments is a national blessing. Unnecessary competition between Japan and America will undeniably result in war between the two nations, resulting in ruinous losses to both sides. The Japanese delegates are aware of the gravity of the situation and will strive with unprecedented determination to achieve limitation of armaments. Admiral Kato is a statesman of real vision, not a jingoist. His habitual reticence is his only fault. Prince Tokugawa is well fitted to act as arbitrator amongst the powers. Baron Shidehara will conduct the negotiations with the counsel of Admiral Kato.

Limitation of armaments is undoubtedly practicable.

The standard of naval strength for Great Britain, America, and Japan may be 10, 8, and 6, all ships larger than dreadnaughts to be put out of commission, and no huge ones to be built in the future. Naval strength should be limited to the needs of police duty on the high seas.

By joint agreement abolish all strongholds on the Pacific. Japan should dismantle Port Arthur and the Pescadores. America disarm all naval bases in the Philippines and Guam. England to abandon all idea of making Singapore the naval base of her Pacific operations by putting additional strongholds and concentrating greater naval power there.

[Yorodzu, 23 October, "Disarmament is expected."]

It is expected at Washington that Japan will propose the dismantling of all defensive works of the Pacific islands at the Pacific conference, and the United States will agree to it. Unless the spirit of mutual concession and conciliation is given free play by the delegates of the participating nations, no satisfactory agreement with reference to the Pacific will be reached at the conference. Still the United States is anxious to make the conference a decided success, and reduction of armaments is the wish of the majority of the American people. Besides, the sincerity of Japan is being gradually understood by them. These facts bid fair to the success of the conference. If the United States does not give expression to her intention of economic aggression at the conference the reduction of armaments may be carried into practice.

[Mr. Yujio Ozaki, 23 October, at Imperial University.]

The success or failure of the Washington conference depends upon the achievement of the primary object of armament limitation. To discuss Far Eastern problems separately from disarmament would do more harm than good. Disarmament would guarantee against hostilities.

It is not so much China's political condition as the absence of sincerity on Japan's part that brought about the present quandary regarding Shantung. Armed threat has stood between Japan and Chinese friendship. A solution will be reached only when Japan succeeds in convincing China of her sincerity, not by mere assurances, but by deeds.

Some Japanese insist on the application of the open door principle to the Pacific generally, including the other side of the ocean, to facilitate a solution of the emigration question. They must be reminded that the policy in question has, during the past 20 years, been advocated in a commercial sense alone. The emigration question is very serious to the Japanese, it is true, but this should not outweigh consideration of other nations' convenience and rights, circumstances which can easily be realized by the Japanese, by assuming an influx, for instance, of Indians into this country. Japan ought to be grateful to the powers for their sympathy in the question of her superfluous population, but she should not forget that it requires a solution from within. There is nothing to be proud of in causing a nuisance to others through failure to properly control her population.

[Yorodzu, 27 October. "Japan ready to Agree."]

We do not know if the basic plan of the United States for reduction of armaments is of such a nature as to insure its realization, but the Government and people of the United States are keenly alive to the need of reducing armaments. If cumbrous questions are shelved at the Washington conference, reduction of armaments will be successfully agreed upon by the powers. Japan is ever ready to cooperate with the other powers in this matter.

[Osaka Mainichi, 29 October. "U. S. is Sincere."]

We are convinced that it is most advisable for Japan to hold out her most sincere and true feeling for the conference. Japan should state her convictions and look for a point of compromise. In this connection we are grieved to find that the army is asking for appropriations for undertaking new operations in the coming fiscal year. Aviation equipment is necessary, but the expenses should be met by economy in other things military. The increase in army expenditures will incur the suspicion of the world. We should not hesitate to make sacrifices to a certain extent in order to achieve our hopes for peace. The policies of the nation should not be directed by army and navy men. International politics and psychology should determine the nation's policies.

[Nichi Nichi, 29 October. "Spheres of Emigration."]

Some publicists and politicians in Europe and America are inclined to give due recognition to Japan's necessity for finding outlets for her surplus population somewhere, designating Eastern Siberia, Manchuria, and Mongolia for these outlets. Suppose such emigration spheres were established there, the question would arise of their suitability for Japanese emigration. If not so adapted there, establishment would be of no value.

Our emigrants are doing well in the Pacific States of America, Canada, and Brazil, but not faring satisfactorily in lands in geographical propinquity to Japan, especially in the north regions. This is because the last-named localities are lacking in the economic elements to furnish opportunities to lead decent and comfortable lives, and in these regions even their lives and property are sometimes endangered. If, therefore, Eastern Siberia, Manchuria, and Mongolia be selected for population outlets, we must give such regions not only safety for life and property but also such economic elements and factors that will ensure their living there. Proper police and courts must be established. The South Manchurian Railway is a powerful economic institution for the inducement of Japanese emigration to South Manchuria. The powers must permit the provision of special facilities for the welfare and safety of Japanese emigrants in these regions.

[Miyako, 30 October. "U. S. Aerial Program."]

The report that the United States is about to construct unprecedentedly large military airships each with a flying capacity sufficient for making trans-Pacific and trans-Atlantic flights with ease and in a short space of time, is being received with a sense not altogether free from suspicion by peoples of different countries. Whether it is a mere unfounded rumor or a disclosed secret is unknown at present. But, at any rate, it is strange that, while a reduction of armaments is to be discussed and a disarmament conference will soon meet at Washington, the United States is credited with such a gigantic military plan.

We hear that the United States will propose in her plan for armament reduction, to be submitted to the conference, that she will not fortify the Philippines and Guam as long as Japan will not do so in her island possessions in the Pacific. This we consider quite reasonable. But why she will fortify the Hawaiian Islands, as an extension of the mainland of the United States, is very difficult to see. The American authorities may opine that the fortifications of the archipelago is, to all intents and purposes, for negative defense; but, viewed from the standpoint of Japan, it constitutes an advance post of the United States facilitating her offensive operations in the Pacific in case of emergency.

Should the United States strengthen her naval bases at Hawaii, station her powerful squadrons therein, and, further, be supplied with large naval and military aircrafts which will be able to fly over to Tokyo in a short time, the program of our national defense must of necessity be altered, and the reduction of naval armaments of Japan will become a mere hope on the part of the Japanese people. If the alleged construction of such powerful airships by the United States is a fabrication, pure and simple it is very well. We hope it is a groundless report.

[Dr. Shigeo Suyehiro, Law Dean, Kyto University, in an address at Kobe before 1,200 students, October 31.]

Japan's naval aggrandizement scheme on its unprecedented scale will increase the naval appropriations year after year. *The most newly constructed warships displace 40,000 tons, but a ship of 60.000 tons is already contemplated, at a cost of 100,000,000 yen.* This is insanity on the part of this nation, which is unable to carry the burden of such a preposterous plan and is steadily approaching bankruptcy.

This unnecessary competition may bring on a war. The cause would probably be difficulties regarding China, who would probably remain neutral. Japan does not produce enough coal, iron, oil, and cotton to prosecute a victorious war with China neutral and other sources of supply cut off. Japan would be isolated and starved and the country doomed. When our countrymen talk of relying on the *Yamato Damashi* (Spirit of Japan), they must remember that Americans have their American spirit which was demonstrated in the recent war. America would be unanimous in her determination against Japan in case of a war with us. We dread to think of the consequences when we consider all these things. We must exert ourselves to eradicate all causes that may tend to a war, and disarmament is the most logical way to accomplish this object.

[Chuo, 1 November, Mr. Nakanishi, Japanese Member of Parliament, gives views on return from round the world trip.]

The Americans are sincere in their attitude towards the limitation of armaments.

Some Japanese size up the Washington conference as if it would end without any noteworthy result. That is a great mistake; the Japanese people should approach the conference with sincerity and whole heartedness. If after Japan had done all that she could to make the conference a success and yet the conference fails, Japan will be able to escape criticism of having blocked the conference. If the Japanese attitude is lukewarm and the conference fails, Japan will have to face the universal criticism of having defeated the end of the conference.

[Osaka Mainichi, Army reduction urged, 2 November.]

The times demand that Japan strive for reduction of armaments, even without cooperation of the powers. While the budget is to be cut down, the army and navy appropriations remain as large as before, and it is vital educational expenditure that is to suffer. Gen. Sato contends that 42 army divisions are necessary to guard against the revival of Russia and to safeguard the flow of supplies from the Asian continent in case of war between Japan and the United States. The maintenance of a large military force is not absolutely necessary for the defense of a country. Future wars will be contests of the powers of peoples. The existing 21 divisions are the product of Russophobia, and although the cause has disappeared with Russia's collapse, the army strength remains unchanged. Good popular resources and power will produce a strong military power in a short time. To increase such resources it is necessary to reduce existing armaments and especially the army.

[Yomiuri, 3 November.]

Lord Northcliffe declares that Great Britain and her oversea dominions will unanimously take their stand on the side of the United States in a war between that country and a certain country in the Pacific.

The object of the Anglo-Japanese alliance has been achieved, the countries which constituted its objectives have collapsed, and it has been made clear that it will not be applied to America.

It is of no further use except as a reminder of its past usefulness and efficiency and a sentimental band between Japan and Great Britain. Now, in view of Lord Northcliffe's declaration and the very delicate relations of Japan with the United States, it should be abrogated without delay.

Lord Northcliffe's declaration that England will array herself with America against that country which will be hostile to the United States causes great displeasure to the Japanese people and must annoy the United States if she wishes to be more friendly with Japan. The alliance is therefore an instrument of occasional difficulties and disputes between America and Japan. As the United States considers the alliance a source of danger to the peace of the Pacific and makes its abolition a necessity, Japan should abolish the alliance herself and reestablish relations of amity and friendliness with England and the United States on an entirely new basis.

[Japan Advertiser, 5 November.]

The following is a portion of the last statement for publication made by Premier Hara before his assassination at Tokyo Central Station at 7.45 p. m. 4 November, 1921:

"I not only hope for the success of the arms limitation conference, but I am optimistic as to its outcome. It is my desire that Japan's wishes be made clear; that her delegates will be frank and open, and that misunderstandings, which have piled up, be swept away. I understand that Mr. Louis Seibold, in articles

published in the American press. has made the statement that Japan attaches no great importance to the conference. This is quite contrary to the truth. Japan attaches the greatest importance to the conference and is sympathetic to and desirous for its success. Japan appreciates the sincerity of America's motives and purposes. In advance of the conference we already feel its effects. On both sides of the Pacific public opinion is welcoming constructive ideals and is less responsive to destructive criticism.

"I should have preferred to have gone to the Washington conference as a delegate, but political conditions at home prevented it. There is the opening of the Imperial Diet which is to be held at the end of next month. Then there are many other questions, such as Shantung and Siberia, which it is my earnest desire to have settled at the earliest possible date, if possible before the early days of the conference."

JAPANESE SECRET TREATY.

Source: The Northern Commune.

24 November, 1921.

The following articles discuss at length a secret agreement between Japan and Germany against England and the United States.

We are informed as follows from an entirely reliable source:

At the end of October there was received entirely trustworthy and exact information of arrival at Stockholm of the Japanese envoy extraordinary, Oda, for the purpose of conduct of secret negotiations with the German ambassador, Lutius. for the purpose of conclusion of a secret German–Japanese agreement. An agreement on the main principles has been reached, after which Oda left for Berlin for the final elaboration of the treaty itself. As a result of negotiations there appeared a project of a treaty, which is being published here, together with the explanatory memorandum.

We are perfectly reliably informed that on the German side no other man than Schiedemann himself supported the project in question, while against it was the deputy from the Center, the State secretary, Erzberger. The revolution which followed in Germany prevented the carrying out of the plan, which found its expression in this project of treaty and which consisted in bringing about a restoration in Russia with the combined forces of Germany and Japan, and in creation of a Russian–German–Japanese alliance, with Russia subject to the other two partners. After the (German) revolution this agreement became known to the German press, and it has been given publicity by the "Rote Fahne." This revelation called forth a lively talk and a fierce polemic, while the press standing close to the Government strived to refute the very fact of conception of such a project. The materials at our disposal leave not the slightest doubt as to the genuineness of the documents published by us, the more so as into the composition of the Japanese committee entered one of the most prominent Japanese public men of German orientation, Gen-

eral Tanaka (minister of war), whose speech, pronounced by him on May 7, 1917, in defense of the alliance with Germany, provoked immediately a protest from the side of all the Allies. Besides, it appears from the documents published at an earlier date by the people's commissar for foreign affairs that the attempt to conclude a separate peace between Germany, Russia, and Japan, and at a later date an alliance, has been made by the German Government in March, 1916, through its ambassador in Stockholm, the same Lutius, and the Japanese ambassador in Stockholm, Uzida (Ushida?)

The Explanatory Memorandum to the Project of a Secret German-Japanese Treaty. (Translated From the German.)

The question of the wisdom of the western orientation, which has been followed by the German policy during the course of the entire war, has received such an exhaustive reply from the very march of events that a critical examination of it is hardly worth while, the more so as it has at the present time only a historical, but not a practical significance. The western orientation drew in its train this further error, that it was not desired to conclude peace with Russia, as it was considered possible in Social Democratic circles to conserve a prolonged state of preparedness for the conduct of war under the devises of a war against the reactionary Tzarism.

A complete opposite to this was Japan's policy, which has concluded during the war an alliance with Russia, the entire significance of which, in view of disruption of Russia, lies in the future.

Germany projected to conclude peace with England at the expense of Russia, but, as circumstances have shown it, those calculations have proved to be not only false but also pregnant with hard consequences in the sphere of inner policy to the Germanic union and its allies.

This was, however, not the only error of the given political orientation. Having become convinced that an agreement with England was not attainable either directly or through America, Germany has missed the moment for a timely agreement with Russia, through which it would have been possible to throw a safe bridge to the Near and the Far East. By this orientation Germany would, most likely, have prevented the disruption of Russia and would have covered, and even fortified, its eastern rear in the economic, political, and military sense.

It would have been improbable even that, with an eastern orientation of Germany, the bolshevism could have led to such calamitous consequences in Russia as we observe it these last 12 months, and the progress and domination of bolshevism would have been only a passing phenomenon and, in any event, would not have brought along with it such grave inner and external shocks to that country.

Thirdly, there would have been improbable in such a case, the falling off of Bulgaria, the ruin of Turkey, and the disruption of Austria-Hungary.

The eastern orientation of Germany would have placed before England the necessity of renouncing a purposeless war, as, in consequence of constant losses in tonnage, her future economic development would have been exposed to dangers, while Russia, supported by Germany, would have become dangerous in the political sense for her vital Asiatic nerve.

If Russia, supported by Germany, is a powerful, menacing factor presenting a serious danger to England and compelling the greatest care in England's policy, then much stronger must be this powerful factor if Japan should join this alliance, basing herself, on the Continent, on Germany and Russia.

Such an orientation would present the greatest danger to America and England. Hence follows the conclusion that the center of gravity of the future world policy lies in reestablishment of Russia, cleaned out of Bolshevism and supported for a period of years from without, in which both Germany and Japan are equally interested.

There would accrue to Japan from such a combination that advantage that through this mutual insurance with Russia and Germany, via a treaty, Japan would become a very strong military factor with which America would have to count, the more so as a split between America and England on the question of self-determination of nations is only a question of time. This new political triple alliance would mean for Japan a struggle for the hegemony on the Pacific Ocean.

To Russia such an alliance would present a double advantage on the political and economical grounds, as, in the economical respect, she would be fortified by Germany and Japan, while, in the political sense, she would be safe from English and American attacks until such time as she again became a great power. (Would not the two nurses, Germany and Japan, strangle the sick Russian baby in their tight embrace?—*Translator's note.*)

The advantage to Germany would be in the way of concessions in Turkestan territory, making her independent from America in the matter of cotton. In the political and military sense Germany would be completely covered in the rear—on land by Russia, on the sea by Japan.

The final end of such an alliance would be forcing of England out of Asia, her isolation from America (through Canada and India), and an economic expulsion of America from Siberia and of England from Russia, while, on the other hand, there would follow economic exploitation of China, Central Asia, and Persia, the spheres of influence being distributed as follows: Germany would have freedom

of action in the south of China, in Persia, in Central Asia, while Japan could claim the north of China, Manchuria, Mongolia, and Eastern Siberia.

The Project of a Secret German-Japanese Agreement. (An Approved Project. (Strictly Confidential.)

ARTICLE I.

The both high contracting parties bind themselves, as soon as the world's political situation will permit it, to assist the third party (Russia) in bringing about order in its domestic situation and in its returning, under their guidance, to the status of a great power.

ARTICLE II.

One of the two high contracting parties (Japan) pledges itself to grant to the other high contracting party (Germany) participation in the privileges accruing from its treaties with the third sovereign State (Russia), in so far as they concern Central Asia and Persia, and to assist in conclusion of treaties between this third sovereign State and the two contracting parties in the interest of their greatest benefit and security.

ARTICLE III.

One of the high contracting parties (Japan) pledges itself to grant to the other contracting party the right, accruing to it by the treaty, of sharing in the benefits, due to the most favored party in southern China, and in other places defined by this treaty, in form of concessions which are still to be defined by a special treaty, and both the contracting parties obligate themselves not to permit granting of further concessions to other States (America and England) in localities which are to be defined.

ARTICLE IV.

One of the high contracting parties (Japan) pledges itself to indirectly safeguard the interests of the other high contracting party on the future peace conference in order that burdensome peace conditions bring on it possibly less harm in the form of territorial and financial losses.

ARTICLE V.

One of the two high contracting parties pledges itself to obtain from the third party, on the basis of a treaty to be concluded with it after its recuperation, formulation, and conclusion of an agreement in the interest of the second party (Germany) for mutual security along the military, political, and economical lines and will place its services in this direction at the disposal of the second party (Germany).

ARTICLE VI.

In consideration of the above, the second high contracting party (Germany) pledges itself to conclude a secret military convention on sea and on land for the purpose of reciprocal security and mutual defense against the aggressive intentions of America and England, the details of the convention to be worked out immediately after the conclusion of peace by special plenipotentiaries of both high contracting parties.

ARTICLE VII.

The secret treaty resulting herefrom shall define the fundamental lines of the foreign policy of the three high contracting parties and it can be elaborated fully in all its separate articles only after the reestablishment of the third high contracting party (Russia).

ARTICLE VIII.

The present agreement is concluded for a period of five years, reckoning from the moment of reestablishment of the third party, excepting Article IV of the agreement, which becomes effective immediately after the exchange of the ratified instruments. In the case that none of the high contracting parties announce six months in advance of the expiration of the treaty, the latter automatically continues in force until the one or the other of the contracting parties shall announce its termination.

ARTICLE IX.

The present agreement must be ratified at an earliest possible date and the ratified instruments must be exchanged in Stockholm. The instrument of the agreement must be prepared in two copies, in the French and the German language, the German text being authoritative for Germany, the French for Japan.

A NEW PHASE OF THE STRUGGLE FOR THE PACIFIC.

Source: An Eminent French Author, Rene Pinon.

The following article is a very exhaustive treatise on the subject by an eminent French author and merits careful perusal, particularly in view of the subjects now before the conference at Washington:

1. At the moment when, in Europe, the inherent difficulties attendant upon the liquidation of the Great War continue and grow more bitter and retard the consolidation of the continental order, here, at a stroke, on 11 July, 1921, an invitation from the President of the United States recalls to the States exhausted by five years of war that Europe is not the globe, and that in other parts of the world there are matters of serious opposing interests that demand attention. At the moment when the supreme council in its tragic impotence works for the reaffirmation of peace, here suddenly arises the specter of war on distant horizons, which are for us the extreme Orient, and for the Americans the extreme West; for when one talks of disarmament does not that very fact admit the possibility of war and the fear of its breaking out?

2. The conference to which President Harding summons Great Britain, China, France, Italy, and Japan is to meet in Washington on 11 November; here it is proposed to regulate the delicate questions which on the shores of the Pacific put the interests of the United States and those of Japan in opposition; here also the place to arrive at a general limitation of armaments. The two questions are distinct, but none can fail to see their close relationship. There will be no limitation of armaments unless there remain no risk of war over questions arising in the Pacific. Thus, on the third anniversary of the day when the Armistice separated the opposing armies in Europe the capital interests of world passes from the countries bordering the Atlantic and the Mediterranean to the distant countries in Chinese waters. Three years! A short time, so short that its very brevity emphasizes the importance of the interests in litigation at the Antipodes.

3. From 1894 to 1905 the Chino-Japanese War, which so suddenly revealed the military power of Japan, the taking of the Philippines, which brought the power of the United States into Chinese waters (1898), the establishment of the Germans in Kiao-Chow, then the Boxer revolt and the siege of the legations in Peking, finally the Russo-Japanese war, turned toward China and neighboring regions the attention and the forces of the great States to whom commerce and expansion are law and economic life. After the treaty of Portsmouth (Sept. 5, 1905) Europe, rebuffed, mistrustful of the distant enterprises, found herself occupied with affairs at home, the Balkan complications, and the menace of Germany, then the series of Morrocan incidents alternating with the crisis of the Eastern question, until the final launching of war by Germany in 1914. President Harding's invitation presents us with a new phase of the struggle for the Pacific.

4. North America is like an island. The United States have two coasts—the Atlantic and the Pacific. From the one they look toward Europe; from the other toward Asia and the yellow peoples. The opening of the Panama Canal gives America the facility for a double policy regarding her front. The great work conceived by the audacious genius of Ferdinand de Lesseps, preserved, if not for France at least for America and humanity, by the clear seeing tenacity of Philippe Bunau-Vanilla has given American policy greater play and elasticity; enabled to concentrate her squadrons in either ocean she can rapidly form her battle line, whether toward Europe or toward China. Hardly had the United States accomplished her part in the war on French soil before we note with suprise that she turns her attention to the Pacific, and when we would see her concerned about the Rhine and about Poland and Constantinople she talks to us of China and of Silesia. At the root of such possibilities it is correct to place the Panama Canal, a Franco-American work too long misunderstood. The first period of the struggle for the Pacific has been the accomplishment of the lock canal as it exists to-day; a sea-level canal will be the outcome of the new phase now opening, a canal definitely joining the two oceans without obstacle.

5. In order to understand from now on the full meaning of the invitation of the new President of the United States we must view it in all of its aspects. It is at one and the same time a maneuver of internal politics and an act of foreign policy. Expansion in the Pacific is a part of the program of the Republicans; it was Roosevelt who, in May, 1903, stated, in a speech at Watsonville, that the control of the Pacific was reserved to the United States.

6. From the policy of President Wilson, his successful opponent takes that which has retained some credit with the American people—the effort for universal peace. He does not ally himself with the League of Nations, the work of the Democratic President, and for which the last election demonstrated the aversion of the public, but he seeks similar ends by different roultes and to restore around the problems of the Pacific the union of the powers with whom the United States was associated for the triumph over Germany. This happy association he proposes to restore regarding those questions which are close to the interests of the most important States in the American Union, particularly of the Western States, whose votes often turn the balance of elections—the future of China, the mastery of the Pacific, the exclusion of yellow races. This is the *internal* politics of the situation.

7. From the point of view of foreign policy President Harding gives to Japan, so unpopular in the United States, a direct blow in putting up to her the alternative of renouncing her policy of expansion in Asia or running counter to the United States and to Europe, and to the principles which she herself

proclaims. Incidentally the Washington Cabinet thus embarrasses British policy. Will the latter renew her alliance with Japan; and if so, will she not be obliged to choose between Japan and the United States, whose friendship is most valuable and whose enmity would be formidable? And if England continues in alliance with Japan would her moral authority be strong enough to carry along with her the Dominions of Canada, Australia, and New Zealand, which touch the Pacific and which shall fear the Japanese peril? By the favor of such divergences will not the United States succeed in gaining the direction of the Anglo-Saxon "consortium," at least in the Pacific? Would not the United States thus by force of circumstances displace old England, the true homeland of the self-governing Dominions? And at a stroke we see the foreign office conclude that the treaty with Japan, which, so they said a few months ago, was becoming decrepit at the end of the 10 years for which it was concluded in 1911, has not further reason for being renewed and is put off from year to year by tacit renewals so long as one of the parties thereto has not given a year's advance notice of discontinuance. Thus, not forgetting to note that American industry and commerce are highly interested in the "open door" in China, we have given a general view of the motives which have prompted President Harding to take the initiative.

8. This initiative has been a surprise only to the chancelleries of Europe to whom matters in the antipodes have been veiled since 1914 by events of war and peace. In the American Congress there has been an important change of opinion in favor of general disarmament, whether under President Wilson or since Mr. Harding came into power: it is a subject which Americans, who feel assured they will never be invaded, and who like to attribute to themselves the rôle of humanitarians, approach voluntarily. The Rogers resolution before the Senate Committee on Foreign Affairs (spring of 1921) declares in favor of a naval program which shall not be inferior to that of any other nation until such time as an international agreement shall be reached, and it has in view a meeting at Washington of a conference where will be represented Great Britain, Japan, France, and Italy. It is almost word for word the invitation of President Harding. On their side the Japanese press since last January have favored a conference of the three great powers of the Pacific, Great Britain, United States, and Japan, for the limitation of naval armaments. The Tokyo Asahi of 12 January writes:

9. "Who does not want a conference of the three countries? In any case if America takes the initiative in this conference it will be necessary that each renounce its selfishness. She will thus be able for the first time to dispel the fears of the English and of the Japanese and will set an example to the other powers. What does Mr. Harding think of this?" The editorial of the Jiji of 30 March insists in the same manner that the conference is urgent. 'The person best qualified to preside is the President of the United States. We beg Mr. Harding to open his conference." Japan has confidence in the valor of her officers and of her sailors, but it is less certain that her finances would permit of her keeping up a fleet numerically equal to America's for any length of time, if the latter chose to increase her armament. When the Japanese press realized that, in the mind of the President, naval disarmament was allied to problems of the Pacific they received his proposition with greater reserve.

10. However this may be, it is certain that President Harding's invitation marks a point of departure of two currents of opinion in America and in Japan; the first is common to both, the second, on the contrary, shows them opposed in a contest already long standing. The President's invitation renews

the thought that the struggle for the Pacific is ever open and now enters an acute phase. We wish to indicate its origin and character.

I. The Struggle for the Pacific, From 1894 to 1921.

11. The Review has been among the first to draw attention of the general public to the importance of the struggle for the Pacific (1) and to point out the rival ambitions and menacing armaments in the largest of oceans (the Pacific). The struggle for the Pacific was and is, in fact, a struggle for China. The ocean is but a highway and the islands point for rest or bases of operations; the objective is the vast empire which knows not how to defend itself or to make the best use of the untold latent riches at its fertile soil or of those beneath that soil.

12. Since the eighteenth century the constant effort of the Empire of the Czars was in this direction; the Russians were the only ones enjoying the advantage of approaching China by land, through Central Asia and Siberia, and appear less strange and foreign to the Chinese than did the "devils of the sea," the Portuguese, English, French, Americans, and others of the nineteenth century. Up to 1894 it was a matter of simply engaging or obliging China to open her country to commerce and to European penetration. Diplomacy was employed when it would serve, otherwise cannon (Peking was taken by the French and English in 1860). The trades of Europe hung on to the skirts of China; they gained concessions (Shanghai and Tientsin, etc.) where they enjoyed the privileges of extra territoriality. Catholic and Protestant missionaries penetrated into the provinces the former were placed by international treaties, and by virtue of the instructions of Rome, under the high protection of France.

13. From 1894 on, the drama is complicated by the entry upon the scene of a new personage, one who from the first is aggressive. From the beginning of Meiji (1868) Japan has completely changed the external form of her economic and moral political life; it became Europeanized; great industries were started and her ports opened to foreign commerce. She adopted the tools and arms of western civilization without changing the character of the national spirit. Japan has a very large population, prolific and poor, who live on rice and fish, who have need of the fishing grounds of the Okhotvh Sea and of the rice from Korea and from China. In 1894, there arose a dispute between China and Japan regarding Korea, which was then a State tributory to China. The small Japanese squadron of Admiral Ito destroyed the Chinese battleships, to the great scandal of the English who gave ill-concealed moral support to the Chinese (battle of Yalu, 25 July, 1894), the army of Marshal Yauragota landed in Manchuria, scattered the Chinese forces, and marched on Peking. Vanquished China signed the peace. By the treaty of Shimonosaki (17 April, 1895) Japan acquired the large island of Formosa and the Pescadores, obtained a protectorate over Korea, and the cession of the Liao-Tung peninsula with Port Arthur and Talien-Wan; together with an indemnity of three hundred million yen ($150,000,000).

14. By the revelation of the power of Japan and the weakness of China the question of the Pacific, even though an Asiatic question, because at once European and a matter of world politics. The diplomatic tradition of Russia was that of friendship for China and its protection against the other powers. Russia sought the support of France to affirm and to safeguard the double principle of the integrity of the Middle Kingdom and of the "open door" for foreign commerce.

15. Germany joined Russia and France, seeing a chance to benefit by her intervention. On 20 April, 1895, the three powers gave the Mikado's Govern-

ment "friendly advice" to renounce the annexation of Liao-Tung. Japan had the good sense to yield to this demand. The principle of the integrity of the Chinese Empire was the expression of wisdom and prudence; China with her four hundred millions of people and her venerable original civilization, is not a savage tribe; to encroach upon her territory would be to set a dangerous precedent; it was more just to aid her and to lend her a little at a time from European civilization the indispensables for modernizing; to dismember China, to divide her up, would have forced her to arm, to become militarized, and when such happens to a State whose men are in unlimited numbers, the danger is readily seen. For having violated the principle which they themselves now defined and laid down for Japan, the European powers will find themselves entangled in a series of difficulties, conflicts, wars, and catastrophies.

16. Germany set the bad example, and Russia was soon tempted. Germany's pretext was the assassination of two German missionaries to Shantung, and with much to-do she sent an expedition to the Far East and obtained the long lease of Kiao Chow Bay and back country, with economic advantages (6 March, 1898). At the same time German diplomacy and William II urged Russia and the weak Czar to take advantage of the occasion to accomplish her time-honored ambition for a port on the Pacific (at the door of Tientsin), a port that should be closed to them by neither ice nor treaties. The Cabinet at Petersburg succumbed to the temptor, obtained a long lease and occupied with her military the very Liao-Tung peninsula which their policy of three years before had obliged Japan to vacate. From this capital wrong follow all the difficulties, all the misfortunes, up to the time of the Great War. Chinese national feelings are wounded; a cry of hatred for foreigners is heard throughout the vast Empire; the Boxer insurrection results in an international expedition in 1900. Her interests and her pride being injured, Japan makes energetic preparation for the struggle that she sees is necessary for her economic development and national expansion; and it is the Russo-Japanese war of 1904–05 that paralyzes Russia in Europe because of her defeat in Asia and because of the revolutionary uprisings of 1905, and Germany, encouraged in her insolent policy of expansion and of imperialism, brings about the incidents of Morocco. The occupation of Kiao Chow by Germany, tolerated and then imitated by the other powers, is the point of departure for a series of tragic events. Held in check until the voluntary false step by Germany, the troubles all run from that first false step as from a source of poison—failure to respect the dignity and the territorial rights of Chinese people.

17. Great Britain took no part in the Russo-Japanese War, but by reason of her alliance of 30 January, 1902, with Japan, her policy contributed largely toward making the war possible for Japan. Japan thus realized her own value and power, and under the auspices of England entered into the circle of the great civilized powers and as an equal before the public law of Europe. To break the power of Russia, to arrest her movement toward Constantinople and toward China, has ever been an axiom of British policy. In 1904 Japan served her purpose.

18. The defeat of Russia did not remove her influence from the Far East; the treaty of Portsmouth, thanks to the officious mediation of President Roosevelt, established Japan in Russia's place in Port Arthur and in southern Manchuria and gave Japan half of Saghalin and the rights to fish in the Sea of Okhotch. Japan gained much but Russia lost little; she remained a great power, and a neighbor to China; her more prudent policy returns to the maxims which in Japan, as in Russia, well-informed statesmen had long since advocated: an entente between the two countries, the integrity of the Middle Kingdom, at least of the "eighteen provinces" which constitute China proper,

an equitable division of influence. A clever diplomatic work by Marquis Ito, Motono, Isvolsky, and the French Ambassador, Gerard, in Tokyo, brought Japan and Russia closer and closer together, and by a secret treaty of 3 July, 1916, made of the enemies of 1905 friends, associates, and allies. The Great War found them in the same camp.

19. Up to this time in the struggle for the Pacific, partners and opponents remained the same—Russia and Japan; America in the Philippines and in the economic enterprises in China, Germany in Kiao Chow, England in Hongkong and Singapore and in Australia, New Zealand, and Canada; France by her empire in Indo-China and the Archipelagoes, Holland in East India, Belgium in her economic activity. But the war eliminated two currents. By the loss of Kiao Chow and all of her Pacific possessions vanquished Germany disappeared from the China Seas as a territorial power. Russia, a prey to revolution, is separated from Bolshevik Russia; ephemeral powers arise only to disappear promptly. The field is clear in China for a grand Japanese policy of influence and expansion. China herself, since the revolution, has overturned the age-old empire whose authority was from on high, has not been able to recover her balance or to set up a stable and truly national government; divided against herself, her provinces fighting one another, the more democratic South against the more military North, she offers only feeble and intermittent resistance to foreign aggression. No serious obstacle arrests the play of Japanese influence, except as American interests give her cause for alarm and for offense. The United States against Japan is the present form of the struggle for the Pacific.

II. China and Japan During, and Since, the War.

20. Brilliant victories on land and sea in two successive wars, a defensive alliance with Great Britain, an *entente cordiale* with Russia, a splendid economic impulse all prompted Japan when the war of 1914 broke out to play her rôle. The objective was within her reach; it was Shantung and the German islands in the Pacific. Reasons of high political morality, the violation of Belgian neutrality, have been able to play some part in the determination of the Imperial Government—they have not sufficed to move the practiced and realistic politicians of the "Genro" or ministers of the Mikado. The alliance with Great Britain did not require that Japan enter the struggle where English interests were in no wise menaced. On 14 August, 1914, Japan addressed the Berlin Government an ultimatum clearly giving her reasons and her object: Either Germany will cede to Japan her rights in Shantung or Japan will make war upon her. It is China and not Europe that concerns her; Japan, with her spirit of decision, seizes occasion to eliminate Germany from the waters of the Pacific and to occupy, across from Liao-Tung which she already holds, Shantung, which faces her on the south coast of the Gulf of Pichili. She thus holds the two advanced bastions which command the sea highways to Peking. Tsing-Tao, the fortified center of the German colony, capitulated on 7 November, 1914; Japan took over the railroad, and all German establishments fell into her hands. Thenceforth the war was finished for Japan. She had not fought in *the* war, but had fought her *own* war.

21. In taking Tsing-Tao her losses were 12 officers and 324 men killed, 40 officers and 1,140 wounded, besides a small cruiser that sank with 280 of her crew. With China and the Pacific swept of German ships and colonies, the effective military participation of Japan in the war was at an end; diplomatic efforts by the allies to get Japan to send troops to the West failed; some munitions were furnished to Russia and some light cruisers took part in the Mediterranean against the submarines. If we be thus precise, we mean by

no means to belittle the value of Japan's part in the war against Germany; we highly appreciate her moral support. It was but natural that Japan should lend but limited assistance, since her interests were confined to the Pacific; but then, we ask why, during the negotiations of the peace, Belgium and Rumania were designated as powers with limited interests and Japan acknowledged to have general interests?

22. During the war and throughout the negotiations all the diplomatic skill of Tokyo was directed to remaining in Shantung and definitely establishing Japan there. In 1915 the despot of China, Yuan-Shi-Kai, desired that China enter the war on the side of the Allies; twice he made the proposition which Japan brought to naught; to the proposals of the allied ambassadeurs, Viscount Ishii replied, "Japan can not consider without concern the organization of a powerful Chinese Army such as her participation in the war would entail, nor could she see without anxiety the liberation of the economic activities of a nation of 400 million people." Later, when in 1917 China was able to declare war on Germany, her entry among the belligerents partook of a diplomatic success on the part of the United States over Japan. Japan wished to avoid doing justice to the claims of the Chinese who were invoking the rights of peoples to dispose of themselves and who demanded that Kiao-Chow be immediately returned to them; the occupation of this important piece of Chinese territory by the Germans had already, said they, been cause of much unhappiness; it was time to return to the sane principles enunciated by diplomacy that meant the integrity of the Middle Kingdom.

23. At first the Japanese let some of their press announce, but without being too definite, that Kiao-Chow would be returned to China after the war, but the foreign minister denied having made any such engagement. The Tokyo Government went even further. On 18 January, 1915, it addressed to the Chinese Government a series of demands, which it renewed as an ultimatum on 7 May, and by which China was made to understand that Japan entertained no obligation to return Kiao-Chow, but would take steps looking to the establishments of a Japanese protectorate over all China; Japanese advisers for her policy, finances, army, control of her police and of her foreign loans; Japanese munitions and shipyards; the Japanization of China would have been an accomplished fact. Strict secrecy was one of the stipulated requirements. The Chinese Government rejected clauses transgressing her sovereignty, but saw that she must concede those clauses concerning Kiao-Chow.

24. At the end of the winter of 1917, at the very moment when the United States was preparing for her part in the war, Japanese diplomacy obtained from her allies, Russia, France, England, and Italy, secret conventions, no doubt in the hope of seeing an active Japanese Army in the field, admitting to Japan all of Germany's former rights in Shantung. The general treaty of peace was thus prejudiced. It remained for Japanese diplomacy to obtain American assent, or at least something that looked like assent; this was the principal object of the mission of Viscount Ishii in the fall of 1917, he being one of the finest diplomats of a country where everyone is a diplomat. The negotiation followed in the United States between himself and Mr. Lansing reached ambiguous formulas which, by themselves, are almost lacking in sense and which have value only from the interpretation that one may give them, and especially for the future, which adds to one of these opposing theses the weight of success or of force. The Ishii-Lansing text recalls the most vexatious Franco-German documents on Morocco. The United States obtained a double guarantee; inviolability of Chinese sovereignty, and respect for the principle of the "open door," thinking thereby to have guaranteed and safeguarded the future at least until the end of the war. But Japan obtained

recognition of her "special interests in China, particularly so to that which concerns the parts which touch her possessions." The Japanese, too, thought to have safeguarded the future and even hoped, under cover of their "special interests," to put over in practice all their ambitions and to arrange that the other powers should not disturb the situation in China without previous Japanese assent.

25. On the first of November, the eve of the signing of the Ishii-Lansing convention, the Russian ambassador in Tokyo, Mr. Krupenski, wrote to M. Sanzonoff: "I have the impression, following my interview with Viscount Motono, that he admits the possibility of future misunderstandings, but he is of the opinion that then Japan will have at her disposition more efficacious means than will the United States for seeing that her interpretation shall prevail." If this text was not altered by the bolsheviki when they published this correspondence it has the value of an admission; and one is less surprised that it should have escaped the prudence of such a statesman as M. Motono when it is recalled that Russia and Japan had become allied by the secret treaty of 3 July, 1916, for the exclusive division of influence in China.

26. The treaty of Versailles, conforming to the secret accords of February-March, 1917, gives to Japan full satisfaction. Article 156 expresses it thus: "Germany renounces in favor of Japan all rights, titles, and privileges, notably concerning the territory of Kaio-Chow, the railroads and mines and submarine cables which she has acquired by virtue of the treaty with China of 6 March, 1918, and all other acts concerning the province of Shantung."

27. This is a splendid gift from the Allies to Japan, for Shantung has more than 30 million people; it is one of the richest regions in China; the Germans had made large expenditures on economic development there, built more than 400 kilometers of railroads (Tsing-Tao to Tsinan-fon), and had the concessions for two other roads. Shantung is, moreover, an energetic and virile province whence come good soldiers and the marvelous colonists who are gradually making Manchuria Chinese.

28. Alliances are costly; the Allies recompensed Japan generously for her modest part in the war against Germany. But China refused to sign the treaty; the United States have not ratified; Russia is absent. The Allies could not fail to hold to their obligations to Japan, but they may already see that in the Far East they have sown difficulties and conflicts for the future; their diplomacy will not fail to counsel Japan not to use the rights transferred to her by the treaty, excepting to obtain, with the good will of China, advantages purely economic and profitable to the two countries. It would be scandalous that China should have just reason for saying that after the Great War, in which she legally took part, the old injustice at Germany's hands had not been repaired, but had only changed hands. History proves that one does not with impunity violate the salutary principle of the integrity, the independence, and the economic equality of China. Diplomacy and the press may write epilogues on the coming conference of Washington; one may even perhaps exclude from official discussions the difficulties regulated by the treaty of Versailles; in spite of all, the question of Shantung will continue to dominate the debates; it will occupy all minds, for there will be no security in the China Seas and no certainty of peace between Japan and the United States excepting it be regulated in conformity with right and justice.

III. The Japanese in China.

29. All policy in the Far East has two faces; the one official, the other is advanced according to circumstances; but the second, after all, is the only

real one. Shantung will be returned to China; the Japanese wish only to live on good terms with this great country, to develop their commerce there, and to promote the country, as they have shown the way, in the ways of European civilization. This is the official thesis. Read, for example, the speech of Viscount Uchida, minister of foreign affairs, in January, 1920: Japan asks only to put into practice the principles defined in the negotiations of Paris and to return Kiao-Chow to China. At various times the president of the council, Mr. Hara, has developed the same point of view. Japan has no territorial ambitions in China and asks only cordial, friendly relations with her neighbor. Only, how carry on commerce and affairs generally with a country given over to anarchy, dismembered by numerous governments impotent to preserve order? The Japanese allege that it is the intrigues of Americans that keep the Chinese from coming to an understanding with them, or from being, to their own greater advantage, brought by Japan toward order, liberty, and prosperity; that China become again a peaceful country, hard working and policed, and Japan will make it her duty to return all effective rights of sovereignty over Kiao-Chow.

30. Unhappily, reply the Americans, it is stated that Japanese agents take care to foster disorder and division in China; it is stated that it is they who at Yunau furnish subsidies to the dictatorship of Gen. Tsai. Would the Republic of Canton exist but for Japanese support? In truth, Japan profits by the troubled situation in the republic to assure herself advantages and guarantees for the future.

31. Initially she lends money to the various governments, who go into debt, and who, to discharge interest and capital, grant concessions for railroads, mines, and exploitations of all sorts or even hypothecate one after another of the revenues of the various branches of the fiscal administration. In 1918, the Chinese loans from Japan exceeded 200 million dollars and they have multiplied since. Without the Anglo-French administration of the customs all the revenues of the ancient empire would already have passed into the hands of the Japanese creditor. The banks of Japan, with far more discipline than most of our own, are a powerful arm in the hands of the Government, an instrument of its policy and working only at its direction, multiplying the patriotic loans to China and the Chinese. The "Korean group" of M. Nishihara is particularly active. On 20 July, 1918, the Japan Advertiser of Tokyo published an analysis of an official report on the financial activities of Japan in China. We read in it, "the work of the Japanese bankers in China is entirely directed by the Government, even when their loans have an ostensibly economic character;" we learn here also that certain Chinese banks, such as the Communication Bank in China, have Japanese advisers. Since that time the Japanese grip tightens; the Government of the North has waged against the South a war which cost 14 million dollars per month. On all sides Japanese eyes and ears are open; commercial travelers, officers, engineers, agents of every sort, all work for the Japanese fatherland, taking census of China's riches, taking account of her incapacity to defend them or to develop them. If a functionary needs money, he finds a lender; if an enterprise seek establishment, it finds a purchaser of bonds. In 1910, the Japanese numbered 3,361 in the international concession in Shanghai; in 1915 there were 7,169, and during the war they multiplied everywhere. Their written and oral propaganda against the white excited Chinese opinion in the name of the solidarity of the yellow race, whose defenders and educators they posed as being. They seek also to make moral conquest of China and utilize to their own ends even Buddhist missionaries, a special school for whom prepares them along more

patriotic than religious lines. Thus the little Jap works little by little, works and extends his interests and his intrigues throughout the immense country.

32. For Japan the war has been a time of extraordinary economic prosperity. Encountering almost no opposition, the Japanese flooded China with the products of their industry and captured the markets. They even cultivated the poppy in order to sell to the Chinese opium, which is so severely proscribed there; this traffic only slowed up in response to the protestations of the American press and even of some Japanese papers. Thanks to their agents or accomplices everywhere they do as they like in organizing veritable monopolies to their own profit. The principle of the "open door," always affirmed, respected in appearance, is constantly turned. "The Japanese merchants always find ships, facilities for entry, cars which are refused foreigners under pretext of formalities not properly complied with, congestion, or lack of means of transport." If we may believe one eyewitness: "My investigations permit me to state that there exists a veiled system of preferential rights directed exclusively against foreigners." A great sorrow for Americans in search of a market.

33. The Japanese practice intimidation as well. The Lansing-Ishii convention serves them to make believe that, under cover of special interests, America recognizes Japan's protectorate over China. During the war and immediately after the treaty of Versailles, the Japanese in Shantung by all manner of "truce"—let the word pass to mean what it may—came to buy, at bottom prices, the mines and factories of the province, notably glass factories and collieries of Po Chan. Finally, by the same process, the Japanese concluded with China, on 30 May, 1918, a convention which, under pretext of common intervention in Siberia, confided to themselves the organization and utilization of the Chinese elements which cooperated in the expedition. The result was the convention became a dead letter; it is none the less significant. The Japanese seek to interpose as intermediaries between China and the rest of the civilized world; they treat China as a protectorate. Only recently Count Okuma remarked, "We fail to understand why China also should be invited to the conference at Washington." Such a state of mind is characteristic.

34. China struggles in the net that ensnares her; the national spirit fights against Japanization. Students returning from universities and schools in Japan bring the most bitter anti-Japanese propaganda. For the liberation of their country from the Japanese supremacy which would destroy its soul and suppress its national individuality, they attempt to make use of methods whose use they learned in Japan. Economic warfare is the arm of an unarmed people. Admirably disciplined companies of Chinese workers began at once, after the unfavorable issue of the Paris conference, to make Chinese claims to Kiao-Chow, and set up a boycott of Japanese goods which seriously affected exportation (summer of 1919). The hostility extended, though with less violence, to all foreigners. Antiforeign attitude is a chronic malady in the Chinese mind and is one of the causes of the political impotence from which this great and glorious country suffers. Trouble broke out in the ports, notably in Foo Chow, where Japan had sent some cruisers which remained before the harbor until 31 December, 1919. Little by little the Government and the Viceroys calmed the agitation without stilling the spirit. The Chinese kick against the Japanese pricks, but China has neither Government no rarmy, neither navy nor finances; she holds herself up by virtue of her mass; in spite of revolutions, her traditional life continues, thanks to the force of her organization, of the family, municipal and corporal. But the weakness of the central power, the particularisms of the provinces, personal rivalries sagely kept up by foreign intrigues and money are a perpetual temptation for her neighbors. Dangerous mirage! None even conquers China, no one even domi-

nates her; it is she who in the end has even absorbed and assimilated those who think to govern her to their profit and to take her out of her old national ways.

35. By the affinities of race, by their written language, by the constant interchange of commercial and intellectual relations, Japan may succeed in some measure in influencing the material development equally profitable to the two countries; but she will go wrong every time she seeks to impose on China, openly or indirectly, the Japanese direction of her military and moral policy.

36. Then she will find, and always she will find, before her not only America and all the powers who have commerce with China, and who have respect for her ancient civilization, but also China herself, redoubtable, still unorganized, by the extent of her territories and the multitude of her inhabitants. Imprudences, such as the publication in a popular paper of a sketch of the "New Japan" swallowing Shantung, Foo-Chow, Kirin, Fong-Tien, Mongolia, and Siberia, do more harm to the Japanese in China and in America than all the skill of their diplomacy and of their agents can accomplish in their favor.

IV. Economic Expansion of Japan.

37. But the problem has its complications; for commercial expansion, colonization, the exportation of men who are always born in excess, and of manufactured goods, which the growing industrialization of Japan accumulates even more in abundance, is not a luxury for Japan or a surplus of prosperity; it is a vital necessity. The policy of Japan is but to serve and to follow—at times with regret, for she is conscious of the dangers that may arise—the economic needs of her population.

38. In the Japanese Islands the population accumulates in numbers, especially in the southern islands and in Nippon; but Neso is almost empty. The Japanese do not migrate voluntarily; they prefer to live in misery on their own soil which they love, and far removed from which they promptly fade away, rather than go to work under other skies where the climate is not favorable to them. But there is a limit to the excess population. The Japanese empire numbered 77 million subjects in 1921, of whom 56 millions are in Japan, 17 million in Korea, 3½ million in Formosa, 100,000 in Saghalen, plus inhabitants of islands, of distant colonies, such as Shanghai, the islands of the Pacific, and finally the Japanese in the United States. The increase of births over deaths amounts to 14 in a hundred. The native population in Korea is dense; there is little room for Japanese who emigrate there unwillingly, not feeling themselves at home there. Formosa is vast, and sparcely populated; but the climate is too hot for the Japanese. They must, therefore, feed their population at home, provide them with rice and fish, on which they live, and above all keep them at work. Under the impulse of the State and of the banks, Japan becomes more and more an industrial country; the smoke of factories obscures the clear sky.

39. During the war the industries and commerce of Japan profited greatly, due to peculiar and exceptional circumstances; Japan became a great center of production and distribution. In Singapore they all but completely eliminated English commerce.

40. In India, there were but 32 Japanese in 1911 in the whole peninsula; they swarmed there during the war, their importations, 1918–1919 amounted to 23 million pounds Sterling; their exportations by sea, which had been 30,000 tons in 1912–1913, amounted to 530,000 tons in 1918–1919. Firms, ships, banks, all became Japanese; it was a veritable economic conquest which could not fail to exercise moral and political influence and to precipitate the evolution of the movement for autonomy, encouraged, also, by the examples and propa-

ganda of the bolsheviki. In the Pacific, in the East Indies, Japan profited from a veritable monopoly. In China her commerce tripled from 1913 to 1919. Europe herself, where the war had arrested manufacture, even as needs increased, turned to Japan and we see Rumania ordering machinery of Japan for rebuilding her plants. Japanese beer was consumed in England. The United States are among Japan's best buyers of tea and silk, an *ad valorem* duty of 45 to 100 per cent not serving to keep silk fabrics of Japan from entering in abundance in the States of the Union. The Japanese are seeking to conquer the markets of Latin America, and their activities are disturbing to the Yankees. Especially in Mexico the Japanese invoke a measure of blood kinship, more or less authentic, with the Aztecs, offering themselves as strong and rich cousins able to assist the Mexicans in their resistance to the political and economic influence of their powerful neighbors.

41. An accord has been concluded whereby the shipyards of Japan are to furnish Mexico with four large steamers and four coasting vessels; the crews to be Mexicans, but trained by Japanese. There is a question of building Japanese works in Mexico and of purchase of land in Lower California. Already in the Upper Amazon of Peru, the Japanese have bought extensive unexploited holdings. The large navigation company, Nippon-Yusen-Kaisha, pushes its shipbuilding and multiplies its lines; immediately after the Armistice it extended its bimonthly line as far as Hambourg in rivalry with other lines. Thus Japanese merchant marine profited largely by the war. From every point of view the economic expansion of the Empire of the Rising Sun has made a formidable leap to the front.

42. But peace interrupts the carnival. Competition reappears. Urged by the need for recovering her markets, England appears with all her energies. On 24 November, 1919, in the House of Commons, Sir F. Hall and some of his colleagues gave voice to the concern of the Chambers of Commerce. Baron Goto's visit to Manchester, followed by a Japanese delegation, and his reassuring words, did not serve to efface the impression gained from the facts, the English must engage in the struggle in order to assure to England the facilities for exportation so essential to her life. In China the boycott of Japanese goods accomplished serious losses to the merchant. Finally, in Japan itself the condtions of work are changed by the high wages and short hours. They find themselves obliged to compete more on a basis of equality with other industrial countries. At the end of 1919 the wages of an American workman were about twenty times those of a Japanese; but wages are on the increase, while the capacity of a workman is not, and it is estimated that notwithstanding the 12-hour day the output of a Japanese workman is not more than half that of an European. A labor movement appears in Japan. Up to the present all socialist propaganda has been rigorously forbidden and suppressed: but ideas are not suppressed, excepting as antidotes be applied on principles of greater justice or as satisfaction be given to those based upon truth. Marxian doctrines have crossed the intellectual customs borders with which aristocratic Japan had been surrounded; supported by Bolshevik propaganda, they have found their way into the factories and even into the chairs of their universities. A labor movement is on foot for the 8-hour day.

43. On the other hand, Christians, both Catholic and Protestant; an élite, generous and working for reforms, who come to Japan, claim for workmen of all categories economic and intellectual freedom—one of them, M. Kagawa, with ideas formed in the United States, shows, after the manner of Christian-Social movements in all countries, that greater idealism and social justice is not incompatible with good labor organization. Misery among the lower classes in Japan is frightful; the population grumbles and increases in the streets and

suburbs of towns, in fishing villages, on the too narrow fields; they begin to realize their distress and to react accordingly. In the summer of 1918 there were strikes in Kobe, Osaka, Kyoto, and Tokyo, because of the rise in price of rice, which the people, as always, attributed to manipulations of speculators. There were deaths, fires, pillaging of shops; the Mikado gave 2 million yen from his private purse—but a drop of water in the sea of misery. For the relief of needs so pressing, and which are coming to be recognized by the sufferers, Japan must have factories, and lands to which to send her emigrants, seas and fishing grounds where her fishermen may fill their nets.

44. But during the war the factories became too numerous, employed too many people, built too much machinery, and manufactured too many articles of all sorts, which at the end of the war they could not market because competition reappeared, even from Germany;[2] the demand fell off, and while exchange favored Japan it closed markets to her. The Japanese have been unable to keep up their brilliant war commerce; after too sudden and too great prosperity the crisis has come. While the public has made riches, the public debt has grown 260 million yen since 1914; paper money has inflated currency by more than a billion yen. The budget of 1921, the greatest ever known, is yen 1,360,000,000. The military expenses have never been greater, while commerce is suspended; from day to day Japan finds facilities less for marketing her manufactured products.

45. The United States hardly buys any more of her raw silk, and the Chinese, aided by Americans and Europeans, seek to create in China industries indispensable to a great country. Thus the future of Japanese commerce appears to be precarious. Coal is lacking for great industrial development; manual labor is in plenty, but of mediocre quality. With much anxiety they seek means for meeting the growing needs of a population ever increasing and ever hungry. The prosperity of Japan disturbed America, Australia, Canada, and particularly China; they feared that its expansion would mean conquest, as in Korea; but the economic crisis which closes the outlets without lessening the needs is even more alarming; a State strongly armed, and even victorious up to now, may be tempted to employ force to open the doors now closed and to resort to preventing war. Among the military of Japan there is a small clan of ardent admirers of the Germans. The army and the navy are in excellent shape; the alliance with England is still in force. The Japanese statesmen are prudent and skillful; they know where the rashness of the German methods leads; they are resolutely pacific, and they know the price of good relations with America.

46. But ancient Japan is disappearing; the "Genro" will presently become but a memory, and the voyage of the Imperial Prince marks the advent of a new spirit; the democratic politicians are less patient than the historic oligarchy. And above all, one must live; the prophets of ill omen claim that the conflict for supremacy in China is inevitable, and there is still the question of Siberia, where American interests oppose those of Japan, and that of the islands in the Pacific, and finally the moral conflict for equality of races in the United States.

V. The Japanese in Siberia.

47. Will the Japanese find in eastern Siberia that expansion of territory and colonization so necessary to them? They sought it with tenacity during the war, which explains their policy as to Russia.

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[2] German importations to Japan in the first quarter of 1921 amounted to 437,500 pounds sterling, plus those carried by Dutch ships. In 1918, Holland started a line of ships, bimonthly service, to the Far East. Holland sent 200 German instructors to the East Indies.

48. Japan gained a foothold on the continent when the treaty of Portsmouth gave them a protectorate over an empire of 17 million souls—Korea, which up to that time had been a vassal of China. By decree of 22 August, 1910, the protectorate was annexed, without European dissent in favor of the protesting Koreans. Since then the grasp of Japan on Korea has grown tighter, and the hostility between Russia and Japan, of 1904, became an entente and then an alliance. The Koreans took advantage of the Great War and of the Paris conference to renew their protestations in the name of the rights of their people; they recognize the benefits deriving from the civilization brought to them by Japan, but complain that Japan's administration works to the denationalization of their people. In March, 1919, troubles arose; the funeral ceremonies of the former Emperor made occasion for nationalist manifestations, of strikes with folded arms. Bolshevist agents took advantage of the circumstances to support a center of resistance and of troubles in Korea. In the summer of 1920 a commission of Members of the United States Congress visited China and neighboring countries. In Korea they could see at close range the methods of Japanese police and hear the complaints of the Koreans. Nationalist propaganda is supported by secret societies; on 20 February, 1921, a Korean in Tokyo assassinated a compatriot named Minwon-sik, accused of being in with the Japanese régime and convicted of having publicly supported propaganda in favor of those whom the Nationalist party look upon as their oppressors. Korea is firmly bound and held, but the Japanese do not feel at all at home there; they have not won hearts, and should they become engaged in a war their adversaries would find in Korea complications which, in case of reverse, would be dangerous.

49. The alliance of 3 July, 1916, between Russia and Japan consecrated and consolidated the territorial situation created by the treaty of Portsmouth, and established a division of influence in the regions tributary to China, a sort of right of sovereignty which implies the exclusion of all other competition and the annulment in fact of the policy of the open door. Russia, even vanquished, remains a force to be recognized. Japan counts upon time and upon her power of expansion to drive her back little by little. But suddenly Russia breaks down and a new field opens to Japan, that eastern Siberia, with its riches of the Amur Valley, of Oussonri, and of Chita, and Saghalien Island, upon which latter, to her regret, Japan had, before the Meiji era, too easily let Russia lay her hand. But Russia was not at home in the Far East; her steppes and plains extended as far as Lake Baikal; but from there on the country was of a new and strange sort, its waters flowing to the Pacific and its people being Mongolian tribes; it was the domain of the yellow peoples, and civilized Japan dreamed of reestablishing there, for the master of Peking has ever been the people who rule in Manchuria, Mongolia, and eastern Siberia. Following the bolshevist revolution, Japan's policy became clear enough; she favored the cutting up of Russia, and the establishment of small States which she felt certain she could control. At the end of 1917 the entente asked her ally, Japan, to intervene in Siberia where more than 200,000 Austrian and German prisoners had taken up arms and menaced Vladivostok, the Trans-Siberian railroad, and immense stores accumulated in the Maritime Province. They made common cause with the bolsheviki. France and England insisted that the Japanese Army intervene; they accepted Japan's conditions, which must be here recalled because they are characteristic; Japan's Army would operate alone; all of the Allies, including America, were to recognize her special interests and sovereign rights in China (following which the question of Kioa-Chow would

not again arise. Japan alone would be able to obtain mining, fishing and forestry concessions in eastern Siberia. America's absolute veto stopped proceedings. The opportunity was lost.

50. Japan thought to recover it in 1918. The powers thought to work together in seconding the efforts of the Checko-Slaves and to support Admiral Koltchak; each ally was to send 7,500 men; Japan was to command. They landed more than 100,000 men and made themselves at home in Eastern Siberia; in order to dislodge them, Mr. Lansing had to make formal demand upon Viscount Ishii; moreover they showed no disposition to assist Admiral Koltchak; far from it, with their money, they supported such Russian revolutionary adventures as Semenoff and Kolmikoff against him; clearly they feared a strong, united and reconstructed Russia. Already they considered Eastern Siberia as a heritage destined to fall to them; their economic expansion extended there along with their military occupation, had even preceded it. Before the Russian revolution, Japanese engineers had studied and inventoried the wealth of Eastern Siberia. The war permitted Japanese traders, with the support of their Government, to flood Siberia with their goods. Munition trains and Red Cross trains leaving Vladivostok for Siberia and Russia were frequently loaded with commercial goods, "when a railroad accident in 1918 revealed that of 29 cars 21 were filled with merchandise in place of the munitions indicated." Thus by every means the Japanese established themselves in Eastern Siberia with every intention of remaining. But the retreat of the Checko-Slavacks brought about the ruin and death of Koltchak, whom the Japanese had failed to support, and put the soldiers of the Mikado in direct contact with the bolshevists, whose agents raised the inhabitants against these new masters. We must go back and consider the matter of the occupation of the ports. In May, 1920, when Nicolaievsk was still blocked with ice, the Bolsheviki massacred the Japanese garrison, including more than 300 soldiers and officers, 40 sailors, a Consul and more than 400 Japanese civilians. The Japanese still keep a garrison at Vladivostok, where they are in contact with the Red Army and they retain the northern part of Saghalien where they say they are going to establish and remain.

51. From this distance, the booty may seem to us small after such vast dreams, but Saghalien is a large island which serves to close the Sea of Japan and to make a Japanese lake of it; it has coal and oil and fish abound on its coasts. And this is enough to arouse Americans. Even before the war, Japan had evicted American commerce from Manchuria where they had dominated before 1903; the Yankees held resolutely to the open door in Siberia as in China, that it should be friction, for their interests and their hopes of commerce in Eastern Siberia are much more important than is generally believed. When they bought Alaska of Russia, in 1867, they did not think much of their bargain; but the gold of the Klondyke has paid them a hundred times. The Americans know that geologically the Tchouktches Peninsula is the continuation, in Asia, of Alaska; gold is there in plenty, almost unobtainable because the ground is frozen to such great depth; but other wealth is there, such as fisheries, furs, forests, minerals, coal and naphtha. Americans want to own both sides of Bering Straits; they still have in mind the project of the railroad by a Franco-American company, the Trans-Alaskan, with which to link the new world to the old. The Japanese press continues to denounce American ambitions in northern Asia; they have accused one American, M. Washington Vanderlip, of having wanted to buy Kamtchatka of Russia and the Peninsula of Tchouktches (Oct., 1920). Bolshevist policy seems to be to seek to play the competitors off against one

another. They encourage Americans in order to curb the Japanese; diplomacy and propaganda are arms which they handle dangerously. Lenine, following methods of his own, has put his feet in the plate: "He has come," said he, "an American millionaire who has frankly explained the motive of an accord, which means that America wants a base in Asia in case of war with Japan." He added that the Soviet Government proposed to lease Kamtchatka to the American who had asked it; "We are going to increase still more the misunderstanding that exists between the adversaries." Thus Lenine explains his policy of "concessions" to foreign capitalists. M. Washington Vanderlip represents a very powerful group of western firms and banks; he wants to lease for 60 years all of north Eastern Siberia as far as the 160th meridian. It seems that much oil has been found there. Oil! Where formerly it was gold now it is oil that attracts the great powers. Oil is essential for peace and for war. There is oil in Saghalien and America does not want to see the Japanese established there. There is oil in Kamtchatka and they seek to establish themselves there, but the Japanese protest. By a treaty in good form (30 December, 1920) the independent Government of Tchita ceded Kamtchatka to the Moscow Government to be leased to the Vanderlip syndicate. Krassine says this is the best means of safeguarding bolshevist sovereignty and the rights of Russia. The bolshevist hope thus to involve the United States in a return to economic relations. The Tokyo cabinet has made every reservation as to "an act which encroaches on the recognized rights of Japan, by a treaty with Russia, or which crosses her vital interests, as results from the geographic situation and for other reasons."

52. If the Soviet Government wished to poison the relations between America and Japan, they succeeded; they have added fuel to the flames. The murder by a Japanese sentry of the American Navy Lieutenant Langdon at Vladivostock, 8 January, 1921, in the midst of all this, provoked much concern in America; but the Japanese Government, recognizing their soldier to have been in the wrong, had the wisdom to accord, and with good grace and generously, all satisfaction that Washington could ask, so that from the incident there came a voluntary demonstration of the pacific and conciliatory attitude of the Japanese Government.

53. Enterprises in Siberia—the Japanese begin to learn—are without profit, but not without peril to the Mikado's Empire; they yield only disappointments; the troops returning from there have been contaminated with bolshevism. Russian nationalism has been offended by the ambitions and intrigues of yesterday's ally; American susceptibilities, already aroused as to China, increased as to Siberia. Life in Japan has been disturbed by this party strife, has seized upon unhappy incidents, such as that of the massacre at Nicolaievsk, to denounce the nationalistic and militaristic policy of the old aristocracy and of the generals.

54. As in China and in Siberia the interests of Japan and the United States—and especially perhaps the national *amour-propre* of the two peoples—run counter to one another on all the coasts of the Pacific and of the seas adjoining. In the Philippine Islands the eyes of the natives turn toward the Japanese. They acquired the German business houses, liquidated in 1916, and their importations come next after those from America, ahead of those from Cochin-China, which imported 140,000 tons of rice in 1917. The Philippine House, "to express to the subjects of the neighboring Empire our desire to increase the good relations existing between us," changed the law requiring that a company doing business in the Islands must have 61% of the capital in the hands of Filipinos or of Americans; Japanese colonization has developed freely in

the archipelago, to which the Democrats and many Republicans are about ready to grant the political autonomy they seek. The recent inquiry by Gen. Leonard Wood and M. Cameron Forbes concludes that in any case, even if granted autonomy, the Philippines should remain in the economic and political system of the United States, else, if entirely independent, would they not soon become, at first in fact and later by law, Japanese?

55. The German islands annexed to Japan by virtue of the treaty of Versailles, the Marshalls, Carolines, and Mariannas, are already colonized and commercially conquered. Australian commerce dominated the Marshall Islands before 1914; it is now displaced, as is the case with the British Elliott and Gilbert Islands. In September, 1920, M. Daniels, Secretary of the Navy of the United States, denounced the military work of Japan in the Carolines and Mariannas. In Hawaii, American territory since 1898, there were 109,000 Japanese among the 255,000 inhabitants in 1920, and the Japanese complain that by indirect methods the Americans seek to suppress their schools. In the New Hebrides Islands, Japanese are replacing the natives for manual labor, and the latter are disappearing, and the Annamite manual labor which disturbs the value of the Indo-China money. The Australians have often expressed the fear lest France sell these islands to Japan, and this is why they asked at London that the question so long pending between France and England be concluded to the advantage of Australia, naturally. The increasing concern in the minds of Americans in view of the population increase and the expansion of Japan becomes centralized in the question of the Island of Yap, one of the Carolines, important only because of the German Pacific cables that land there. The holder of this island will control the cables, which would be a capital advantage in case of war. The Harding administration took early steps to raise this question and to accuse M. Wilson of having neglected American interests, since he conceded, at Paris, that Japan should have a mandate over Yap; the former President claimed to have taken oral reservations on this, of which the English and Japanese disclaim recollection. Public opinion is strongly divided. On the question of the cables the Japanese admit a compromise, but they hold to the benefit of the treaty which gives them the island. This is the principle of the accord entered into between the two parties, the text of which is not published at the moment of writing. The question is singularly characteristic of the interests and rivalries which put the United States and Japan at loggerheads in the Pacific.

VI. Americans and Japanese.

5. We have shown around the great ocean, and especially in China and Siberia, the sharp conflict of material interest very distinctly. In America, as for the penetration of the yellows into the States of the Union, it is rather a psychological question. The matter of the equality of the human races is at stake, but each one solves it according to his own interests and passions. In itself the difficulty is very clear: the Japanese and in general the yellows could they enter the United States under the same conditions as other immigrants, establish, work, open schools, and enjoy the rights of American citizens? No, reply the Americans, and especially those of the West, for they would form in the Union an unassimilable element; there are already too many blacks who must be tolerated in expiation of the crime of having formerly imported them as slaves; but the yellow race is too prolific; the yellow workman has not the same standard of living as the white; he works for lower wages, and if he asks the same wage his return is much less. The yellow man has not the same morals; he is not a Christian. Thus under the ethnic and political question appears one that is social and moral. "The future may mix

all the colors into one; but that time has not yet arrived." It is better then to restrain Japanese immigration as much as possible, and prevent, by special laws, those already in the United States from forming a sort of State within the State. The grand union of whites in the Pacific, the Dominions of Canada, Australia, and New Zealand are of the same opinion as their Anglo-Saxon brothers of the United States; they seek to exclude from their shores these same Japanese whose Government is allied to that of the British Empire. The "Gentleman's Agreement," signed in 1908 between M. Elihu Root and M. Takahira, calls upon the reciprocal good faith of the two countries; the territory of the United States is open in principle to Japanese, but the Japanese Government engages to prevent its citizens from going there to establish. The agreement has been pretty well respected; the Japanese have moral satisfaction and the Americans obtained the desired result. But the people of the West complain; they saw that the Japanese are infiltrating by way of Mexico; that those in America bring in their wives, and thus are established homes multiplying. During the war a new "gentleman's agreement" was being negotiated by M. Roland H. Morris, the United States ambassador to Tokyo, but the new administration of Mr. Harding rejected it and accepted M. Morris' resignation. The Republican President wants to discuss "en bloc" all the difficulties with Japan. The conflict, held up during the war by the diplomacy of the Allies, takes on a new acuteness when Japan asks introduction in the Covenant of the League of Nations of a clause granting the equality of the races; a far-reaching political move, which makes of Japan the spokesman and champion of the "unenlightened" races which eddies and currents of the Great War have awakened and who accuse the whites, masters of the earth, of refusing them justice and equality. Chinese affairs, and especially the decisions of the treaty of Versailles, relative to Kiao-Chow and the German possessions in the Pacific, have the more excited opinion in the United States, since they arose at the time of the elections. The Japanese press accused Hearst of alarming opinion without cause. Baron Kaneko, educated in the United States, declares he understands the American point of view, but that California's alarms are exaggerated; he says that in 1905 Roosevelt said to him: "It would be well to place matters concerning foreigners in America under the direct control of the Federal Government and not under State legislatures." Hearing this the Senators of eleven Western States met in conference to study means for remedying the yellow peril. Already (27 November, 1920) Mr. Lodge pronounced for an agreement with Canada, Australia, and New Zealand regulating the question of yellow immigration.

57. To listen to the press and American politicians, one might expect a fleet of yellow people to submerge the whole West, once the barriers were raised. It is nothing; the question is of a moral and psychological order; but therefore the more insoluble. The Japanese are the first to want their emigrants to go, not to the United States, but to Korea, Formosa, and Japanese possessions: but it is here for them a question of national *amour-propre*. In the winter of 1920–21 the press of the two countries became more and more alarming. The Chicago Tribune of 18 November defended the California legislation and spoke of "the war that perhaps may not be avoided." The New York American of 3 December stated that peace with Japan could be assured only with military preparedness. The Japanese armaments, the 8–8 naval program (that is, for 1928, 8 dreadnaughts and 8 battle cruisers, one of them more than 8 years old), were commented upon with much concern.

58. The American House of Representatives voted for 1921–22 a naval budget of 396 millions of dollars. "War is inevitable if the Japanese do not lower their tons."—(N. Y. Tribune of 18 February.)

59. Difficulties in Mexico increased the concern of the Yankees. Could not Mexico, in case of war, become a more or less passive ally of Japan, who could land troops on her shores? We do not forget the effect produced during the war when revelations were published of the intrigues of the German Secretary of State Zimmermann, who invited Japan to join with Mexico against the United States.

60. President Harding wishes to mark his entry into office with a great deed that shall put an end to American-Japanese difficulties and definitely safeguard American interests in China. By the same stroke, by way of Asia, America enters into the European concert with her former Allies. Such is the origin and such is the scope of the conference which is to open in Washington on 11 November.

61. Will it succeed in preventing a war?

62. If we are to believe travelers returning from China, the conflict is inevitable and will be soon; the last phase of the struggle for the Pacific will open with a gigantic naval war, of which the States will be the supremacy in China and the exploitation of 400 million Chinese by a better armed military State. Studying this distressing problem since 1916, the "Japanese Society" of New York discovered eleven reasons for war and eleven for peace, which they believed to be stronger. Since that time there are increasing reasons for pessimism; the affairs of Kiao-Chow, of Siberia, and of Yap have increased the ill feeling and aroused public opinion. There is hardly an example in history of conflicts so grave that have been solved without war. We wish, nevertheless, to believe in peace. Statesmen on both sides who hold the responsibility of power are pacifically resolved; they know that by fighting there is much to lose and little to be gained. And there is the question of how to carry on a war 4,500 sea miles from one's bases across the immense deserts of the Pacific. But peace can not be assumed except the integrity and independence of China be effectively and loyally respected. The limitation of armaments, envisaged by M. Harding, will lead to naught except that passions also be disarmed.

63. At the Washington conference there will be two influences employed with every good will in favor of a just and pacific adjustment of the questions in the Far East; that of Great Britain and that of France. A conflict between America and Japan would cruelly embarrass British policy: Allied as Britain is with Japan by an alliance that was to expire 13 July, 1921, but which is to continue from year to year until denounced. But the Dominions border on the Pacific and they attach greater value to the friendship of America than to the alliance with Japan, regarding which latter they share the apprehensions and defiances of the Yankees. It was the insistence of the representations of the Dominions at the imperial conference in Washington last July that prevented the ten-year renewal of the alliance with Japan. A war between the United States and Japan would have, as an initial consequence, the dislocation of the moral cohesion, perhaps even the legal unity, of the British Empire. England would find herself driven into a corner to choose between the alliance with Japan and the friendship of America. Many Yankees would, with secret satisfaction see England called upon to solve such an enigma, for opinion in America is not always too well disposed toward the mother country. If it were in the French character to do to England some of the things that England has done to us, it would be permissible that we encourage the conflict; we would find it a good game; in such eventuality we do not know how useful might be the naval bases on our coasts or in our colonies. French diplomacy will aid Mr. Harding with all its influence in his effort to assure peace and looking to the limitation of armaments. Italy

will naturally support the pacific action of France and England. President Harding has happily decided to invite two new States to the conference; namely Belgium, which has considerable interests in China, and Holland, which possesses an Empire in the Far East. May we express a wish? It is that the heads of Governments do not sit in person at the conference, as has been their dangerous custom, for neither negotiations nor diplomatic combinations are possible except a plenipotentiary be able to take refuge behind a higher authority, from whom his own authority derives and to whom he can, under unforeseen circumstances, refer.

64. Whatever be the outcome of the conference about to open, it will be an event of great importance. They can not talk of limitation of armaments in the waters of the Pacific without at the same time confronting Europe with the question. By calling upon Europe to assist in the regulation of questions in the Pacific, America obliges herself to take part in the regulation of European questions. This pleases France; who has never ceased to count on the active sympathies of the United States. By the detour of the Pacific, America takes up again, in European affairs, the place so gloriously occupied during the war; a new phase opens in the consolidation of general peace.

NOTES ON INTELLIGENCE DUTY.

Source: Lieutenant Commander S. F. Bryant, U. S. Navy.

1. The notes are in general grouped under—

(*a*) Information that is desired.
(*b*) Methods of obtaining it.
(*c*) Methods of drawing up reports.

2. Before taking up the first group it is desirable to discuss briefly the demands of a naval information service and to bring out its future importance by showing its intimate relation in modern times with communications.

3. About a century ago when fleets were under sail, communications were of a most primitive and tedious nature.

4. At the present time facilities of the radio and cable enable the operations of a widely scattered fleet to be conducted in fair detail from a flagship and in general from the Navy Department.

5. Taking the communications of the fleet under sail as our origin and present day communications as the first point of development of an imaginary graph, let us project, for the sake of interest, a point in communications 20 years from now. We shall then have facilities, of which at this time we have the same lask of conception that we had in 1900 of our present developments.

6. The result of these inconceived improvements will even further accelerate the tendency that now exists to concentrate the control of naval operations in the Navy Department.

7. To carry on this work effectively at the department and to properly coordinate the increasing types and numbers of naval

units, the operations staff will have to be supported by a naval information service that is proportionately increasing in effectiveness. In time of peace, information that is needed pertains mostly to our own country. Lack of such information will, in general, not produce greater penalty than delay.

8. In time of war, however, operations abroad will imperatively demand that the operations staff as well as the unit commanders of the fleet be completely supplied with information concerning the naval resources and sea areas of all friends and foes alike. Any lack of this information will not mean delay, but useless sacrifice from unpreparedness in time of peace.

9. So it is said that in looking well ahead to our remarkable advances in communication, that we must also anticipate—

(*a*) Increased control of operations in peace and war by an operations staff.

(*b*) The development for this duty of staff officers of special training and experience.

(*c*) For the use of this staff, an information service that anticipates the naval data required on every enemy and friend, both as affecting our policy in peace and our operations in war.

10. This information service must keep pace in its development with the communication service, i. e., the better the latter, the more need will there be for the former by the operations staff as communication facilities increased use of information.

11. The World War showed with an emphasis that was startling that a conflict between large powers can draw into the fight most any nation in the world. We must assume then that we may need information on any area and the naval resources of every power.

12. While the World War emphasized to America the importance of information services, it nevertheless had one great disadvantage in that America was never forced to stand on her own legs in the intelligence game. Most of our information for the Navy was obtained from the British.

13. To go back a little further, America in her modern history has had no opportunity to really test the requirements of a naval intelligence service in a war with a first class power. With Spain, according to some of the principal leaders, many useless sacrifices were occasioned by lack of proper intelligence, and particularly so in Cuba.

14. Not having had a modern war in which we entered single handed, entirely dependent upon our own information service, we have never been given an opportunity to test out our possible deficiencies. Accompanying this condition is the certain and unavoidable sense of false security that goes with a people apparently free from invasion.

15. A factor which does not help the above situation, lies in the probability of having to fight our future battles in foreign waters.

16. Suggestions obtained from various sources relative to intelligence work, may be grouped under three headings:

(*d*) Indoctrination of intelligence officers by the Office of Naval Intelligence as to what information is wanted.

(*e*) Ingenuity on the part of intelligence officers in knowing where and how to obtain the data desired.

(*f*) Knowledge of the subjects on the part of such officers to the extent of their being able to condense their reports to digested and verified facts.

17. As general classes of information desired, there are:

(*g*) That information which will reduce the sacrifices of our forces in time of war.

(*h*) That which is of value in enabling us to honorably avoid war.

(*i*) That which is necessary in the operation and supply of vessels in time of peace.

(*j*) That which is necessary in the protection of American life and property in areas of unstable conditions.

18. In discussing the first of the above classes, it must, first of all, be assumed that modern naval warfare demands the use of every national resource and must be accompanied and coordinated with the efforts of every department of the Government. To bring this out, there is a good division of efforts that may be employed, as listed by the Miltary Intelligence Department under "combat, economic, political and psychologic."

19. All of these four must be turned to their maximum use by all government services toward the reduction of our sacrifices.

20. To do this we must be previously prepared with estimates of each factor, both with respect to enemies, friends, and our own nation.

21. Suppose we apply the combat factor to the case of the Navy against a possible enemy.

22. What must we know of that enemy? What is his strength? How hard a blow can he deal? What are his plans? What are his weakest points? Where can we match our strong points against his weak ones? What are the details of his matériel that we should need to know in our operations against him? These and many questions like them may be asked. They may be summed up by putting oneself in a position of a commander in chief or a unit commander. In time of war what information would they need most? When in a certain locality which presents opportunities for obtaining information the same theory applies. What, in time of war,

would be needed about that locality? What about supplies and repairs? What hydrographic information?

23. Now let us suppose that from our combat estimate that we are not certain of victory by purely naval operations. That immediately brings in the economic factor. How can we shut off this enemy's supplies? How can we restrict his resources to a point of resulting submission? First, we have to know what resources he has already. Then from where and by what routes and in what quantities he obtains his resources. What merchant marine has he for this purpose? What building facilities? What protection in destroyers, submarines, and patrols? Such information will enable us to strike at his points of economic weakness.

24. Then at the same time let us analyze his political situation. Has he any alliances that can be broken up? What peoples are his friends and who are enemies? Where may our vessels expect to find benevolent neutrality in time of war? Again, what are his internal politics? Is there close accord between Government and Navy? Does political dissension exist in the Government itself? Are the people satisfied with the policy of the military elements? Could their resistance in war be broken by propaganda that advertises the virtues of a democratic Government as a price of peace? How can a naval intelligence service be used in this work? How can naval vessels be employed? Again, what peoples are natural enemies and therefore potential allies to our own cause? And how can their friends be kept from rendering active support against us?

25. These political considerations emphasize so strongly the old principle of the value of making good friends abroad. Among the enemies of our possible enemies we create allies; among our enemies we create warriors with dull swords, for a friend can not fight another friend with the same effort.

26. In intelligence work, officers come into contact with any number of foreign officials, and when friendship is really gained, each individual is one more asset for prolonging peace or shortening war.

27. Now let us pass to the psychologic factor. Is our enemy bold, or cautious? What are the characteristics of his leaders? Do they follow premeditated plans or can they meet a situation requiring originality? Again, how do they differ from us in their views? What do we do that appears wrong or unjust to them? What mistakes in our policies are being made, a knowledge of which must be needed to build American policy on a secure foundation? Again, how in time of war can propaganda be used with greatest effect?

28. Knowledge of an enemy's psychology has become indispensable. It must be used in war, in applying all three offensive fac-

tors previously mentioned, and in propaganda can in itself become a most deadly weapon.

29. Examples of the four factors can be found in the last war. Germany could not defeat Russia by combat, so she tried the economic factor in closing the Dardanelles. Adding to that, she tried the political factor in fomenting a revolution. Even that was insufficient, as the Russian Army remained in the war. So she applied the psychological in disrupting the whole social structure of the country through propaganda.

30. Conversely, she guessed wrong in the case of American psychology, with the result of bringing a nation into the war that she had not counted on. This mistake was a principal factor in her defeat.

31. The next class of information, that which would enable us to honorably avoid war, has not in the past been given a definite place in naval intelligence. It is nevertheless good business. The old method of spreading a nation's influence by military conquest has gone out of style. Now that all of the world has been conquered, colonized, or mandated, there is only one logical form of expansion left. That is by honest friendship and fair commerce. Individual officers can do a lot to assist this policy.

32. Naval officers abroad, and in particular intelligence officers, have excellent opportunities for developing friends. Through these friends it is worth while to get the other peoples' point of view of matters that in their eyes seem unjust. Also to find out, as mentioned before, where we may be wrong, for without that knowledge no naval or other policy can have a secure foundation.

33. *Peace information.*—This class of information primarily concerns the operation and supply of vessels. The subjects listed in the Port Directory, published by Naval Intelligence, covers the important points. During a visit of a vessel at a foreign port it is easy for any officer to determine what information is wanted by considering what information his own ship may be in need of.

34. Information that is needed for the protection of American life and property in areas of unstable political conditions like the Yangtze River, requires that certain data be kept on file, such as records of local conditions, epidemics, revolutionary disturbances; numbers and location of American residents; and means of protection and communication. This information is necessary in a proper distribution of naval vessels for protective purposes.

35. There are several miscellaneous items that an intelligence service must keep track of. A list must be kept for all countries of reliable Americans with their addresses and means of communication, from whom information may be obtained either in peace or

during emergency. In addition to this, the names and characteristics of prominent foreigners must be kept, that includes a record of those that are friendly and those that are hostile to America. In time of war a knowledge of leading individuals becomes of great importance.

36. Still another list is that of intelligence officers and agents of foreign countries. A knowledge of these persons is necessary in the service of counterespionage.

37. Further, a list of suspicious characters or persons obnoxious to policies of America must be kept up to date for use in connection with passport control in time of a war, in which America may or may not be engaged. It is only with a list that has been developed in time of peace that undesirable characters can be prevented from entering America.

38. As inclusive of all the above-mentioned classes of information, there is one element of which special mention should be made—the "Title Sheet for Reports." This is the corner stone of the structure of an entire intelligence service. The sheet has been found most practical when drawn up on a single piece of large, durable paper in plain print and suitable for placing under the glass of an office desk for ready reference. The title sheet gives a complete list of the general subjects about which data is desired. It may be used for all the following purposes:

(*k*) A list of subjects upon which information is needed, thus being a guide for officers afloat.

(*l*) A list of titles for reports, so that reports may be filed in all offices in a parallel manner, and so that reports may be filed in the home office under similar headings.

(*m*) As an index for monographs.

(*n*) As an index for general files.

39. For practical use, this title sheet must not contain more than one sheet full of plainly legible subjects. It is suggested that a small, concise booklet accompany this sheet that takes up a few details of each subject, with explanations where possible, of *why* information on that subject is needed. This will give an intelligence officer a better insight in his work. The data might, with advantage, be inserted with the next revised publication of "Instructions in Regard to Intelligence Duty."

40. From talks with intelligence officers afloat, it is believed that the title sheet can be simple and yet include a logical title for any report. Officers afloat have so many routine duties and so much office work that must be finished on time that it is believed that instructions that permit them to carry out their intelligence work in the most direct and simple manner will produce the best results.

41. Let us now go on to the subject of the methods of obtaining information. This is more a matter of businesslike routine than mystery. In each port, in addition to personal observation, the following sources may be taken advantage of: American consuls, Shipping Board representatives, Standard Oil Co., and representatives of other prominent American concerns; missionaries, book stores, newspapers, periodicals, Hydrographic Offices, the captain of the port, pilots, captains of American vessels, and foreign officials and residents that are friendly to the United States.

42. In obtaining information, the most essential factor lies in a large number of widely scattered friends who are not only reliable but are willing to extend assistance that is possible. In a foreign station, an intelligence officer can do well to deliberately establish as many close friends as possible in each port, who can be called upon at any time for assistance and who will, without request, keep him informed of matters of naval interest. Here it is evident that the officer in question must acquaint his friends with what the Navy is interested in.

43. Cooperation is another factor of great importance. This applies to consuls, Army intelligence officers, and, to a limited extent, such foreign officials of any service that may prove themselves friendly. A cooperative exchange of pertinent reports brings with it a material increase in useful information. Lack of cooperation invariably breathes duplication of work, and incomplete and unverified information.

44. The question of buying information is more than a delicate one. If the purchaser is not being tricked or duped, the vendor is at least liable to exaggeration for the sake of increased payment. Outside of exceptional cases, this policy can well be avoided.

45. One of the most important requisites in intelligence work is a knowledge of the subject of a report. Without this, it is impossible to trim off a mass of unimportant data from the meat of the information and impossible to verify a subject from one's own point of view.

46. Unimportant or useless information is a material disadvantage. It consumes the time of the writer, necessitates an increased office force for indexing and filing, and clutters up the general intelligence files to the extent of making it often impossible to find data of importance. It also takes a great deal of time to go over these reports at the department and sift out those that must be further disseminated. As a general principle, it is therefore of great advantage to all concerned, for officers to digest and verify their reports at the source. To do this first requires considerable study of the subjects. Our own war plans, textbooks, department publications, and books and magazine articles on current political questions of importance, can furnish clarifying foundations and parallels for comparison.

47. A few miscellaneous points regarding intelligence duty may be listed as follows:

(*o*) As a general principle, exchange of reports is better at the source between Army and Navy officers than in Washington. The former practice allows both the officers in the field and the departments to get the maximum use of reports in the quickest time.

(*p*) It is always of value to note on every report at the end as to what distribution has been made. This will avoid useless copying by other officers.

(*q*) As a general rule, except in the case where secrecy forbids, it is of advantage to send copies of reports to all American officials that may be concerned. This brings back more useful reports to the sender.

(*r*) In drawing up reports. quality always takes precedence over quantity. Concise reports greatly reduce the work of all concerned in their use.

(*s*) A word might be said of the advantage that officers afloat have in intelligence work, due to their mobility. Their expenses are less than on shore and they can often be sent into areas concerning which we shall have the greatest need for information.

48. In conclusion, we might summarize the meaning of an intelligence service as that keen game of obtaining information that will reduce our sacrifices in war, and at the same time, through its friends, assist in prolonging an honorable peace.

OIL FIELDS IN NORTH SAGHALIEN. (WHY THE TERRITORY WAS SEIZED).

Source: The Japanese Chronicle, May, 1921.

The Mainichi reports that the digging of oil wells in North Saghalien has been in the hands of the Hokushin-kai, which has been entrusted by the navy department with the operations. For the carrying on of the digging business the navy department estimated ¥600,000 for the fiscal year of 1920 and ¥1,400,000 for the following fiscal year. It is stated that in No. 1 oil field wells have been dug to a depth of 116 ken, and that when a depth of 32 ken was reached, 10 koku of crude petroleum was obtained. In consequence, the authorities are very optimistic of the prospects of this oil field. With regard to No. 2 oil field, wells have been dug to a depth of 60 ken, but it still remains to be seen whether it holds out good prospects or not. It is now reported that the navy department and the department of agriculture and commerce have decided

to dispatch special commissions to the territory for inspection purposes. The prospecting of oil fields is expected to be taken in hand at two other places from July.

POLITICAL CONDITIONS IN GERMANY.

Source: Reliable.

The following general observations on conditions in Germany were noted on a recent two weeks' visit there, most of the time being spent in Berlin. I crossed Holland on my way to Berlin and passed out of Germany into Belgium via Essen. Throughout Germany in the sections of the country through which I passed practically every German, it seemed, of all ages, from old men and women to little children, were working. A great many were noted in the fields, all of which appeared to be under cultivation and in excellent condition. It was observed that these people worked until sundown. There appears to be practically no unemployment in Germany.

During most of my stay in Germany no newspapers were published. It was officially stated that this was due to a strike. As a matter of fact the newspapers were suppressed by the German Government.

I received the impression that the Germans are making an honest effort to pay off their reparations in accordance with the terms of the Versailles treaty. The question of payment of the reparations is considered by the Germans to be largely a question of exchange. The recent decision of the Entente with reference to Upper Silesia was a great surprise and a considerable discouragement to the Germans. In point of fact, this discouragement is more a question of morale than material. Two of the towns turned over to Poland are said to be German in ratio of three to one, and the pessimism over the Silesian decision is largely sentimental. The net result is an aggravation of a situation already difficult. The change in cabinet was effected with perhaps less excitement than might have been expected. This was probably due in part to the suppression of the newspapers. The principal object of this suppression was to avoid publishing the discussions in the "Reischtag" with reference to the Silesian decision, as it was a foregone conclusion that the recent German cabinet would fall as soon as the "Reischtag" convened.

It is considered in well-informed circles in Berlin that the new cabinet will propose an international financial conference with the object of stabilizing the German currency and possibly the European exchanges in general. In this attitude the financiers and industrial people will support the cabinet. The question of exchange is of the greatest importance, and it appears that it will be necessary

to stabilize the exchange to enable Germany to meet her reparations obligations. The decision of France to accept reparations "in kind" has helped the situation somewhat. The new cabinet will probably propose that the same arrangements be effected with respect to Great Britain, Belgium, and Italy. This will help further the situation, but will not solve the problem. It is believed that if an international financial conference stabilized the exchange Germany will meet her reparations obligations.

People in all classes and walks of life in Germany look to the United States not only as being the controlling factor in the financial world to-day but also as being more reasonably inclined to assist Germany onto her feet. This is considered to be the principal factor in the present German attitude toward America. It is not correct to say that Germany "likes" America. It is more accurate to express it that Germany hates American less than she does France and Great Britain. The German is convinced that the Frenchman is trying to extract the last ounce and to keep Germany in as near a paralyzed condition as possible. Furthermore, the Germans feel that France desires the territory west of the Rhine, and wishes to occupy it upon the slightest pretence, and that the best pretext for such occupation would be failure to meet her reparations.

It is considered that during the last fifteen to eighteen months the feeling toward Great Britain is becoming less hostile and less bitter. It is evident that the British are making every effort politically, socially, and commercially to improve their relations with Germany. In this connection Great Britain has a very large intelligence service in Germany, with headquarters apparently in Berlin. The naval and military intelligence and the consular services appear to be very active.

The Japanese are equally active, but probably making less progress. It is stated upon reliable authority that the Japanese organization, though less extensive than the British, consists of 150 to 200 agents in Berlin alone; that among this number are technical experts who advise the chief naval and military officers what war material should be purchased. I happened to open the wrong door in a restaurant one evening while dining in Berlin and within the room was a private dinner of fifty Japanese men. One can hardly go anywhere in Berlin without coming across them. On my visit to Essen, where I spent two days, on the register of the private hotel of Krupp's several days prior to my visit were entered the names of several Japanese. Krupp's firm claims to have sold two or three devices to the Japanese and that the Japanese are very anxious to obtain others. Information from various sources in Germany tends to verify such statements. There appears to be founda-

tion for the belief that Japan is earnestly endeavoring to purchase all valuable confidential information concerning war material and to obtain the manufacturing rights of such material.

It is considered that the present time is more favorable for obtaining all kinds of naval and military intelligence information in Germany than at any time since the Armistice.

It is believed that the political situation existing at present is very favorable for the collection of such information. The next year will afford the most favorable opportunity that will exist for obtaining confidential information for purchasing war material. There is a far more fertile field for collecting such information in Germany than in Great Britain and there is every reason to believe equally as much to learn.

Berlin is certainly a continental center for the activities of the various intelligence services of Europe and in addition that of Japan. The French and Italian intelligence services do not appear to be of much value. The British and Japanese are more successful. Naval and military officers permanently or temporarily in Berlin of foreign services are unquestionably kept under very close observation by the agents of the other foreign representatives in Berlin. These services watch each other much more closely than they watch the Germans. This is particularly the case with the British intelligence service. There is reason to believe that my visit to Germany was a subject of interest to the British Office of Naval Intelligence, and that I was under observation from the time I left until the time I returned. There is also reason to believe that the object of my visit to Germany was of considerable interest to them.

The relations of our own office with reference to the Germans appeared to be very favorable and conducive to the collection of intelligence information. The amount of such information that can be collected in the next year (the most favorable opportunity that will be presented) is dependent upon the staff of our office in Berlin.

SALIENT FEATURES OF THE BATTLE OF JUTLAND.

A Lecture Delivered at the Naval War College at Newport, R. I., on 31 October, 1921, by Lieut. Commander H. H. Frost, U. S. Navy.

I. Introduction.

As doubtless all officers of the Navy are now familiar with the general course which the battle of Jutland took, no attempt will be made to describe the various phases of the action, except in so far as the sketches offer a description. These sketches have been drawn after considering all the data and figures recently published in the

official British dispatches, and it is believed that they represent an accurate picture of the battle.

My efforts will be confined to the presentation of original comments and criticism of the most important strategical and tactical features of the action. Despite the adverse criticism which it will be necessary to make in the execution of this task, great care has been taken to view the situation impartially and to be fair to both British and Germans. My only reason for pointing out what are considered errors or mistakes is to bring them to the attention of the officers of our own service, so that if my judgment is concurred in we may avoid them in future wars. The fact that errors were made is a perfectly natural one, and if adverse criticism is made in certain cases it should not be construed to reflect upon the general efficiency of the British and German Navies, which in both cases was certainly very high.

II. The British Strategy.
(Fig. 1.)

[NOTE.—The figures referred to are contained in O. N. I. Pamphlet, "Diagramatic Study of Battle of Jutland."]

The British strategy is well indicated by the following extract from Admiral Jellicoe's letter of 30 October, 1914:

"My object will therefore be to fight the fleet action in the northern portion of the North Sea, which position is incidentally nearer our own bases, giving our wounded ships a chance of reaching them whilst it ensures the final destruction or capture of wounded enemy vessels, and it greatly handicaps a night destroyer attack before or after a fleet action."

This statement shows a very strong desire to fight with all conditions in his favor. As the Germans were greatly inferior, it is very difficult to see how there would be any chance that they would fight a fleet action under conditions which would be perfect for the British. Jellicoe's attitude, therefore, greatly reduced his chances of bringing the enemy to action. A commander who is greatly superior should be so eager for battle that he should welcome one under equal or even somewhat unfavorable conditions.

Another interesting insight into the state of mind of the British commander in chief is afforded by his statement:

"A third consideration that was present in my mind was the necessity *for not leaving anything to chance in a fleet action, because our fleet was the one and only factor that was vital to the existence of the Empire*, as indeed to the Allied cause." (The italics are Admiral Jellicoe's.)

As the great Spanish Armada lay at Coruna and Alexander of Parma with his incomparable army waited in readiness at Dunkirk

for the invasion of England a greatly inferior fleet was hastily assembled to defend the Narrow Seas. The ships were poorly equipped and wanted everything. The crews were only fairly well trained; their gunnery proved to be wretched. No defending army had yet been organized. There was no fortress or fortified city in England. Surely England was then in a terrible crisis. Was anything left to chance in a fleet action?

On 4 July, 1588, Sir Francis Drake wrote a memorandum "To maintain my opinion that I have thought it meeter to go for the coast of Spain."

"There never happened," wrote Thomas Fenner, "the like opportunity to beat down the Spanish pride, if it be effectually followed."

In accordance with these opinions, Lord Howard, the commander in chief, actually sailed to within a short distance of Coruna and was turned back only by a heavy southwesterly wind. "My lord was in a good way," wrote one of the officers of the fleet, "if God had not sent a contrary wind. Our fleet was 80 leagues south by west of Ushant. If the wind had holden two days and two nights longer we had had them in the Groyne."

Corbett made the following statement concerning this operation: "Than that final swoop for Spain at the eleventh hour no more brilliant or daring movement was ever executed by a great naval commander. It marks the opening of a great period as worthily as Nelson's heroic chase of Villeneuve adorns its close. The risks were great, but they had been calculated to a hair's breadth. To sail with an unvictualed fleet and stake its existence on being able to replenish stores from the holds of a powerful enemy, to leave England uncovered when actually threatened by invasion, savors perhaps of rashness. But it was not so. It was a great conception heroically undertaken, but the weather and the queen's hand-to-mouth administration doomed it to failure. None the less should it be remembered to Drake's lasting honour and go far to rank him, not only as the father of the art of warfare under sail, but as one of the greatest of its masters."

It was toward the end of the battle with the Armada that Lord Howard made his famous report: "Though our powder and shot were well-nigh spent we put on a brag countenance and gave them chase, as though we had wanted nothing."

Mahan thus describes the pursuit of the French fleet under Conflans into Quiberon Bay by an equal fleet under Sir Edward Hawke:

"Hawke was himself without a pilot, as were most of his captains. The sailing master of the flagship was charged with that duty for the fleet, but had of the ground before him no exact personal knowledge; nor could reliance be placed upon the imperfect surveys of a locality which it was not the interest of an almost constant enemy

to disclose. Enough, however, was known to leave no doubt of the greatness of the risks, and it was the master's part to represent them. The occasion, however, was not one of a mere diversion, of a secondary operation, but of one vital to the nation's cause; and Hawke's reply, stamped with the firmness of a great officer, showed how little professional timidity had to do with his laudable care of his fleet in Basque Roads two years before. 'You have done your duty in warning me,' he replied, 'now lay us alongside the French commander in chief.' So amid the falling hours of the day the British fleet, under the unswerving impulse of its leader, moved steadfastly forward, to meet a combination of perils that embraced all most justly dreaded by seamen—darkness, an intricate navigation, a lee shore fringed with outlying and imperfectly known reefs and shoals, toward which they were hurried by a fast-rising wind and sea, that forbade all hope of retracing their steps during the long hours of the night."

Hawke stated in his report: "As for the loss we have sustained, let it be placed to the account of the necessity I was under of running all risks to break this strong force of the enemy."

Admiral Sir John Jervis was pacing the quarterdeck with Capt. Hallowell, a passenger on board, during the approach of the British and Spanish fleets at Cape St. Vincent. Sir John was heard to remark, "A victory is very essential to England at this moment."

A little later, when it was made out that there were 27 Spanish ships to 15 British, the captain of the fleet made an observation concerning the greatness of the odds, to which the admiral replied, "Enough of that, sir; if there are 50 sail I will go through them."

Capt. Hallowell patted the admiral on the back and said: "That's right, Sir John, and by God we'll give them a damned good licking."

Paul Jones in 1791 summed up his ideas of naval strategy in one sentence: "It seems to be a law inflexible and inexorable that he who can not risk can not win."

Referring to the attack on Copenhagen, Nelson wrote: "The measure may be thought bold, but I am of opinion that the boldest measures are the safest, and our country demands a most vigorous exertion of her forces directed with judgment."

On 16 August, 1805, Admiral Cornwallis had off Brest a total force of 46 units (counting a two-decker as one and a three-decker as two units). In Brest was Ganteaume with 24 units; at Ferrol was Villeneuve with 30 units. Napoleon was at Boulogne with the army of invasion, waiting for Villeneuve.

Admiral Cornwallis issued the following order to Calder:

"The French and Spanish squadrons from the West Indies having arrived at Ferrol, you are hereby required and directed to proceed off that port immediately with the ships named in the margin (23

units). The *Dragon* has been left there and the *Goliath* was sent to you on the 12th instant.

"You are to endeavor, as soon as possible, to get information of the enemy's force and situation, and use your utmost exertion to prevent their sailing or to intercept them should they attempt it."

Here, in a situation of the utmost danger, Cornwallis had repeated the operation of Howard and Drake. Calder, arriving off Ferrol, found that the enemy had sailed; by a correct decision of remarkable boldness he proceeded on to Cadiz and there discovered Villeneuve. Had Villeneuve evaded Calder and gone into the Channel, Cornwallis would have had only 23 units against 54 of the French and Spanish. That was the way British fleets were maneuvered in 1805 when England faced single-handed the greatest master of the art of war.

In his memorandum before the battle of Trafalgar the greatest commander on the sea included this principle: "Something must be left to chance; nothing is sure in a sea fight beyond all others."

The above somewhat detailed analysis, which might have included far more specifications, has been given to show that the British strategy of 1916 was, except for the cases of Matthews and Byng, comparable to no British naval strategy of the past.

The above failure of the British to measure up to their old and glorious traditions resulted in the war being unnecessarily prolonged for a period of at least two years.

If it is claimed that the British had to consider the United States and thus could not afford the loss of ships, it might be urged that, had the war ended in 1916, Great Britain would not now owe the United States four billion dollars, and would not already have had to scrap many of the battleships and battle cruisers which she could have just as well afforded to expend to some purpose at the battle of Jutland.

On 30 May, probably during the forenoon, the Admiralty received news which pointed to the early activity of the high sea fleet. This news was most opportune and permitted the British to be ready to receive the Germans when they put to sea. The excellence of the British intelligence service is well demonstrated by this incident. If we could know the inside workings of this service, it is certain that we could apply this knowledge to great advantage.

As a result of the information gained, the Admiralty, at 5.40 p. m., 30 May, issued the following order to the commander in chief: "You should concentrate to eastward of Long Fortiss, ready for eventualities." While this order allowed considerable latitude as to the time, place, and manner of the concentration, its language indicates a defensive attitude which tends to give the initiative to the enemy. Would it not have been better to have said: "Proceed to sea

and take advantage of every opportunity to force action on the enemy."

III. The German Strategy.

The German strategy in 1916 is shown by the following statement of Admiral Scheer:

"Finally other important enterprises were planned, such as the bombardment of coastal towns, to exercise a still greater pressure upon the enemy and induce him to take countermeasures, which would afford us an opportunity to engage a part or all of his fleet under conditions favorable to ourselves."

It is considered, in view of the decided inferiority of the high sea fleet, that this plan was a correct one. The chances of a German victory were so small that Scheer would not have been justified in accepting battle under unfavorable conditions.

IV. The Advance of the Grand and High Sea Fleets. (Figs. 2 and 3.)

The various squadrons and flotillas of the Grand Fleet were under way within four hours of the receipt of the orders to proceed. This was a very creditable performance. The commander in chief's orders to the S. O., Battle Cruiser Fleet at Rosyth, and to the S. O., Second Battle Squadron at Cromarty, were clear and precise. The details of the handling of the fleet, as shown by the record of signals and despatches sent, are exceedingly interesting and worthy of careful study. The Battle Fleet and the Battle Cruiser Fleet were very close to their assigned positions at 2 p. m., 31 May.

At that time the distance between the two portions of the Grand Fleet was about 73 miles. This disposition of the British forces has been criticized for two reasons:

(*a*) That it left the Battle Cruiser Fleet out of supporting distance of the Battle Fleet and thus exposed them to being overwhelmed by superior German forces.

(*b*) That it did not permit visual contact between the two portions of the Grand Fleet, and thus made it necessary to rely upon navigational positions in case a concentration were necessary.

With regard to the first consideration, it is interesting to note that Admiral Jellicoe reported after the battle that "It will not be advisable to place our Fifth Battle Squadron in a position removed from support." That squadron had a superiority of speed of at least 2 knots over any German battleship, and it is considered that in high visibility, with advance forces out to give them warning of the approach of the enemy, they ran no appreciable risk of being brought under the effective gunfire of superior enemy forces. If this was the case during the battle, it resulted from improper handling of the Fifth Battle Squadron.

The second criticism is not considered a valid one, despite the difficulty which actually arose during the battle. In the first place, there appears to have been no reason why a mistake of 12 miles should be made in navigation by a large force of ships in excellent visibility. In the second place, the British forces were so superior that an accurate concentration was not necessary.

In order to check up the various positions reported by Admiral Beatty they were plotted on plate 4a of the official dispatches. The table below shows the data obtained from this work. Column A shows the time, column B shows the bearing of the reported position from the true position, column C shows the distance in nautical miles between the reported and true positions.

Column A.	*Column B.*	*Column C.*
3:21 p. m.	103° (true)	4.3 miles.
3:40 p. m.	90°	4.1
3:45 p. m.	95°	5.1
3:55 p. m.	355°	1.7
4:45 p. m.	84°	10.5

This table shows the following points:

(*a*) That the positions used at 3:21, 3:40, and 3:45 show a constant and not excessive error.

(*b*) That there is a great divergence between the positions at 3:45 and 3:55. In fact the last position is 1½ miles to the westward of the first, although Beatty actually steamed at 25 knots on easterly and southeasterly courses during this period.

(*c*) That there was a divergence of about 12 miles between the positions at 3:55 and 4:45. Not over 21 miles was steamed during this period.

(*d*) That there must have been unnecessary carelessness in the navigation of the flagship or in the sending of the positions.

A similar table has been made out for the Second Light Cruiser Squadron. This data is not as accurate as that for the *Lion* and must be considered as only approximately correct.

Column A.	*Column B.*	*Column C.*
4:30	11.8	74°
4:38	17.2	87°
4:48	15.8	95°
5:00	13.7	99°
5:40	9.8	135°
5:55	13.7	126°
6:03	12.8	119°

Among the interesting facts resulting from a plot of the positions are the following:

(*a*) In the period from 4:30 to 4:38, eight minutes in duration, the *Southampton* steamed 8 miles.

(*b*) In the 12-minute period from 4:48 to 5:00, 9 miles were made good.

(*c*) In the entire period covered by the reports, 1 hour and 33 minutes, 52.5 miles were steamed, counting only the shortest distances between positions. This gives a speed of 34 knots. The *Southampton* reported her speed as 26 knots.

(*d*) It appears from the above that the navigation of the *Southampton* was unnecessarily inaccurate.

It is concluded that there was no valid reason why the division of the Grand Fleet into parts should have resulted in disadvantages for the British. If such arose, they were due to errors which could have been avoided.

On the other hand, it was of great importance that a scouting force be spread over a wide area and well in advance of the Battle Fleet, in order to locate and report the High Sea Fleet as early in the day as possible. This advantage far outweighed any disadvantages which might result from a division of the fleet. It is therefore considered that the British dispositions were entirely correct.

The German plan for a raid into the Skagerrak was well designed to bring action under favorable conditions to the Germans.

The critics of Admiral Jellicoe might attack Scheer with much more reason for sending out Hipper so far in advance with a force which was inferior to the Battle Cruiser Fleet in both power and speed. However, as Hipper's scouting line was out 20 miles, he could have withdrawn on his Battle Fleet without coming into contact with the enemy had he so desired. Furthermore he proved that even after coming into contact with superior forces he was well able to take care of himself. No exception, therefore, can be taken to the division of the High Sea Fleet.

It is interesting to note that the German radio station at Neumunster was able to partly decipher a British message reporting the sailing of two battle squadrons from Scapa. The time of sailing was made out to be 8.00 a. m. and it was not determined whether the force consisted of two battleships or two battle squadrons. The Germans also received two reports from their submarines off the British coast, which evidently had sighted parts of the Battle Cruiser Fleet and the Second Battle Squadron. Admiral Scheer states that he was not able to make any deductions from these inaccurate reports.

V. The British and German Cruising Formations.
(Figs. 4 and 5.)

The interesting fact about all the cruising formations of the four principal British and German forces was that they covered such restricted areas that position could be kept by visual bearings and communication be maintained by visual signals, thus making unnecessary the use of radio. The importance of this will be seen

later when the accuracy of the British radio compass stations and the marvelous efficiency of their cipher experts is shown.

The formation of the British Battle Fleet with attached cruisers was about 33 miles long and 40 wide. That of the Battle Cruiser Fleet was 15 miles long and 32 wide. Hipper's Scouting Force covered an area of about 25 miles long and 40 wide; the German Battle Fleet was in a single column about 11 miles long.

VI. The Dispositions of the German Submarines and Airships.

The German submarines stationed off the English coast accomplished nothing of importance during the entire operation except the sinking of the *Hampshire*. Neither did they send in any reports of value to Admiral Scheer, nor did they make successful attacks on badly damaged British ships when exceptional opportunities were offered. In fact, strange though it may seem, they had a greater effect in the actual battle, even though none were present. If the possibility of submarine attack had such a marked effect on British tactics, it may be certain that a few submarines actually present and merely showing themselves from time to time would have had an even greater influence. Admiral Scheer admits that the disposition of his submarines off the English coast was of no value and in subsequent operations used them in lines in advance of and on the flanks of the fleet. This resulted in the sinking of two light cruisers on 19 August, 1916.

The uselessness of airships for naval scouting in the North Sea was never better demonstrated than on the afternoon of 31 May. Although at least one passed directly over the battle, it neither sighted any naval vessel nor heard gunfire.

VII. The Approach for the Battle-Cruiser Action.
(Figs. 7, 8, and 9.)

The British light cruisers attached to the Battle Cruiser Fleet were generally very well handled during the approach. The *Galatea* kept Beatty well informed of the movements of the enemy, although there were some inaccuracies in the reports. The First and Third Light Cruiser Squadrons concentrated in contact with the German light cruisers, and according to the British statements endeavored to lead them to the northwest so they would be cut off by the battle cruisers. This was a very questionable move, as it practically eliminated eight British light cruisers from the first phases of the battle. The Second Light Cruiser Squadron concentrated in a position ahead of the battle cruisers and was available for service when the action commenced.

No attempt to draw in the Second Battle Cruiser Squadron or the Fifth Battle Squadron was made up to 3:30 p. m. As the first unit

consisted of but two vessels, it is not considered that it was powerful enough to be effective against a strong enemy force, and that it should have been ordered to form on the First Battle Cruiser Squadron. No destroyer flotillas were ordered to concentrate before 3:30 p. m.

On the other hand, the Germans were comparatively well concentrated, with all their units well formed and ready for battle.

VIII. The Deployment.
(Fig. 10.)

It was not until 3:34, or 13 minutes before the time of opening fire, that Beatty ordered the Second Battle Cruiser Squadron to take station in rear of the First. As a consequence, the maneuver was not executed until 4:45. At that time, Beatty ordered a two-point line of bearing for the six battle cruisers. This maneuver could not have been completed by 3:47, when the signal to commence fire was made. The line of bearing of the battle cruisers was by no means normal to the bearing of the enemy. As a result of these facts the *New Zealand*, fifth ship, did not commence fire until 3:57, 10 minutes after signal was made.

The flotillas were not ordered to concentrate nearly soon enough. As a consequence only 12 destroyers and 1 light cruiser leader were available for service during the battle cruiser action. Many of the other destroyers attempted to gain their positions by passing along the unengaged side of the battle line and their smoke interfered greatly with the gunfire of the battle cruisers.

The Fifth Battle Squadron was not ordered to close in on the battle cruisers and therefore was unable to enter the action until 21 minutes after fire was opened. This was probably a wise disposition on the part of Beatty, because, had the Fifth Battle Squadron been sighted by the Germans, they would probably have declined action and Beatty would have lost his opportunity to engage.

All things considered, the British forces were in a badly scattered condition when fire was opened. It is probable that Beatty misjudged the rapidity with which the two forces were approaching each other and came under gunfire very much unprepared. This mistake is one which will rarely be avoided.

Hipper also was not as well concentrated as he might have been. He had the advantage, however, of having all his battle cruisers in a steady formation, the line bearing of which was nearly normal to that of the bearing of the enemy. Twenty-two destroyers and one light cruiser were well concentrated in advance of the battle cruisers. His four remaining light cruisers, Scouting Division II, were well in rear of the battle cruisers and consequently in an unfavorable position for supporting destroyer attacks, their principal

duty in a fleet action. Ten destroyers were also so far in the rear that they were unable to take part in the destroyer attack which was ordered later.

The degree of concentration of a force entering action should be considered as relative to that of the enemy. It will be seen that Hipper was considered better concentrated than Beatty, and therefore he was justified in commencing the action, even though his own forces were somewhat scattered. Had he delayed opening fire for 10 minutes, Beatty could have made better use of this delay than he could have. Hipper also had been able to gain all the advantages of the weather conditions. In his lee position the smoke did not interfere with him, while it frequently slowed down the British fire. While the visibility was generally very good in all direction at this time, it favored the Germans slightly. The sea being smooth, the Germans were not troubled with spray, while the sun being still high, did not interfere with their fire, although they were firing directly toward it.

The Germans therefore, while greatly inferior in fighting power, entered the action with all conditions in their favor.

IX. The Battle-Cruiser Action.
(Figs. 11 and 12.)

If to the above favorable conditions there be added a decided superiority in the German gunnery and a faulty design in the armor and turret arrangements of the British, the results of the battle cruiser action are readily explained.

In the period from 3.47 to 4.45 the Germans received about 11 heavy shell hits. The following table shows the estimated numbers of heavy hits received by the British ships during the same period:

	Heavy hits.
Lion	8
Princess Royal	5
Tiger	4
New Zealand	1
Indefatigable	4
Queen Mary	8
Barham	2
Total	32

The relative number of heavy hits received shows that the results of the action between the battle cruisers were not due to luck, but to gunfire hits. In fact, it might be said that the luck favored the British, because the *Lion* was just barely saved from the fate of the *Queen Mary* and *Indefatigable.*

It is considered that the manner in which the Fifth Battle Squadron came into action was particularly favorable to the British. The

Germans had presumably entered the action on the assumption that six battle cruisers were all they would be compelled to fight; now, only 21 minutes after the beginning of the battle, they were compelled to engage four battleships at moderately effective range.

It is considered that Scouting Division II should not have run completely out of range of the Fifth Battle Squadron but should have zigzaged at long range, with the object of drawing the fire of the enemy and thus relieved the pressure on Scouting Division I. It also appears that the Fourth and Twelfth Half Flotillas could have threatened an attack on the Fifth Battle Squadron to very good effect.

It will be noted that the Second Light Cruiser Squadron "spread for lookout duties" in advance of the British battle cruisers. It would seem that one vessel could have done the scouting and that the other three could have supported the destroyer attack; as it happened, the *Nottingham* was the only vessel which could be used for this purpose.

It is an interesting fact that at about 3.56 both Hipper and Beatty opened the range. It would have been to Hipper's advantage to have kept on closing the range, to follow up his initial successes, and to enable him to use his secondary batteries. His reason for drawing off was probably to avoid action with the Fifth Battle Squadron.

Beatty was justified in opening the range, because it would tend to draw the Germans into the Fifth Battle Squadron and would give him an opportunity to make good his very severe damages.

X. The Destroyer Attacks.
(Fig. 13.)

It will be noted that neither British nor Germans commenced destroyer attacks until 45 minutes after the action commenced, while we consider it correct to begin the destroyer attack simultaneously with the gunnery action. This delay was probably due to the fact that the destroyers were not properly disposed at the beginning of the action; this in turn resulted from the fact that they were held in their screening positions too long.

The German destroyers attacked in well-organized units, directed by the second leader of the torpedo boats in the light cruiser *Regenberg*. The British attacked in a formation of 12 boats, belonging to the Ninth, Tenth, and Thirteenth Flotillas. It does not appear that the captain (D13) in the light cruiser *Champion* took any part in the attack.

Despite these facts the British destroyers at this time showed a decided superiority over the German boats. While each side eventually lost two vessels, the Fifth Battle Squadron was compelled to turn away only four points, whereas the German battle cruisers

were forced to make numerous radical maneuvers; in spite of this precaution, the *Seydlitz* was hit by a torpedo at 4.57 p. m. The British commanding officers showed splendid gallantry and excellent initiative in this attack, and it seems a pity that they could not have been given other opportunities later in the day.

The track of the German battle cruisers shows their remarkable ability to maneuver by simultaneous turns. This is in marked contrast to the British, who made all turns in succession.

The official dispatches show that Beatty had ample warning of the approach of the High Sea Fleet from the southward. It was previously supposed that they were first reported at 4.38 by the Second Light Cruiser Squadron. In fact, the commander of that squadron had signaled "battleships southeast" five minutes before. Also the captain (D13) states: "At 4.30 p. m. the enemy's Battle Fleet was sighted by *Champion* and reported to you."

This signal is not given in the signal record. It is therefore apparent that the High Sea Fleet was sighted by the *Champion* 12 minutes before it was made out by Beatty and the Battle Cruiser Fleet was turned in succession to the northward. The fact that Beatty continued on to the southward for a considerable time after he knew the German Battle Fleet was approaching from that direction speaks well for his courage. None of the British battle cruisers were hit during the turn.

XI. The Pursuit of the Battle-Cruiser Fleet.
(Figs. 14, 15, and 16.)

There seems to have been little communication between Beatty and Evan-Thomas during the battle-cruiser action; at 4.48, after Beatty had turned to the northward, he made signal for Evan-Thomas, who was coming down to meet him, to turn 16 points in succession to starboard. Evan-Thomas waited until the battle cruisers had passed, and at 4.53 executed the signal; immediately after the turn he sighted the German Battle Fleet at a range of about 17,000 yards. As he had only one or two knots superiority in speed over the leading division of the German Battle Fleet, he was in an exceedingly dangerous position; if any of his ships had been reduced in speed they would certainly have been destroyed by the Germans; had the accident to the *Warspite's* steering gear occurred 30 minutes sooner, she would surely have been lost.

It is suggested that it would have been desirable for Evan-Thomas to have turned to the northward as soon as he saw Beatty commence his turn. In this way he would have maintained the relative positions of the two forces, could not have been forced to cease fire while passing in lee of the battle cruisers, and would have been well out of

range of the German battleships and at the same time within easy range of the German battle cruisers. It is very possible that Beatty would have ordered this maneuver had not his radio been shot away and it had not been necessary to use flag signals, which could not be made out until the two forces were close together.

During the run to the northward the forces actually engaged were practically equal. The British had four battleships and four battle cruisers, while the Germans had four battleships and five battle cruisers.

During the period from 4.45 to 6.00 p. m. the Germans received about 15 heavy hits. The approximate number of hits received by the British is shown by the following table:

	Heavy hits.
Lion	2
Princess Royal	2
Barham	4
Malaya	7
Warspite	2
Total	17

As the British battle cruisers were out of the action from 5.12 to 5.41 p. m., and the Fifth Battle Squadron compelled to support the action single-handed during this period, it is considered that the latter squadron did excellent service. It would not seem as though Beatty was justified in thus leaving the action, unless he felt that an intermission for his badly battered ships was necessary. His absence made it necessary for the *Barham* and *Valiant* to engage the five German battle cruisers, while the *Warspite* and *Malaya* engaged the leading German battleships. The *Barham's* four hits were received from the battle cruisers, while the *Malaya's* seven hits were scored by battleships.

At 5.30 p. m. the *Malaya* was being very heavily hit by the German battleships and might well have been lost. The British destroyers were in an ideal position to push home an attack and relieve the pressure, or at least to cover the Fifth Battle Squadron with a smoke screen; nothing, however, was done.

The *Lion's* main radio had been put out of action at 4.10; at about 5.00 the *Barham* had both main and auxiliary radio put out of commission. This left the *Southampton* as the only flagship with radio. This vessel continued to send out information, all of which was based on geographical positions in error by from 9 to 17 miles.

During the run to the northward Admiral Jellicoe had been proceeding at full speed to form a junction with Beatty. Admiral Scheer points out the fact that no effort was made to get between the Germans and their bases, although this would have been very easy of accomplishment. Beatty could have led Scheer to the west

and Jellicoe could have run down the Jutland coast, passing to the eastward of Scheer. On the other hand, if considered desirable, Beatty could have gone to the north and Jellicoe have headed toward the Dutch coast, passing to the westward of Scheer. Either maneuver would have brought Jellicoe between Scheer and his bases. Jellicoe's only justification for not carrying out one of these moves was that he might have considered the Fifth Battle Squadron in immediate danger of being overwhelmed.

XII. The Concentration of the Grand Fleet.
(Figs. 17 and 18.)

If a concentration of the two portions of the Grand Fleet in a position which allowed the Germans a clear line of retreat was to be carried out, it is considered that it was actually accomplished as well as might have been expected under the conditions. The fact that Beatty blanketed the Battle Fleet for some time with his ships and later with his smoke, and that Evan-Thomas was forced to maneuver under gunfire at moderate ranges is one which might have been expected and for which no blame attaches to any one. The advance of the First Cruiser Squadron may be excused by the poor visibility conditions, although it threw the Battle Cruiser Fleet out of action at a critical moment and resulted in the destruction of two large cruisers without accomplishing any good.

The splendid effect of the attack of the Third Battle Cruiser Squadron on the unengaged side of the German line shows the great advantage of such attacks, particularly when made by a fleet much superior in power. The four destroyers which accompanied the Third Battle Cruiser Squadron attacked with such vigor that Scouting Divisions I and II withdrew before them. The *Lutzow* may have been hit by a torpedo fired by the *Acasta*.

The marvelously gallant work of the *Shark* and *Onslow* was only equaled by that of the German light cruiser *Weisbaden*, which was fought to the end with almost incredible heroism. She returned the fire of the entire British Battle Fleet with one 6-inch gun.

The deployment carried out by Admiral Jellicoe has been much criticized by many writers. This criticism is not concurred in. It is considered that under the circumstances a reasonably good deployment was made. Could it have been made on Division 3 instead of Division 1 it would have been better.

A deployment on Division 6 on course about 210° true, leading to an engagement on opposite courses and the cutting off of the High Sea Fleet from its base is an interesting possibility.

The retirement of Scouting Divisions I and II and the leading destroyer flotillas on the battle fleet was a wise move, as it resulted in the more compact grouping of the German forces. The remarkable

maneuvering ability of the Germans was again demonstrated by this retirement.

The report of the commander, Scouting Division II, that the British Battle Fleet bore northeast was a most unfortunate error, but one which must be expected in low visibility. This mistake resulted in Scheer's finding himself in a very unfavorable tactical position at 6.30 p. m.

XIII. The Battle.
(Figs. 19 and 20.)

About 6.30 p. m. a most interesting situation arose. By this time the entire British Battle Fleet was in action; their gunnery was favored by the visibility. On the other hand, only the leading German battleships were in action. The commander of the leading battle squadron commenced a turn to the southeastward in an attempt to relieve the situation. His ships received many hits, while they were unable to even see their targets, due to the very low visibility to the northward.

Admiral Scheer's withdrawal from this extremely unfavorable position was a masterpiece of tactics. It indicated a marvelous control over his units, so little expected that Admiral Jellicoe apparently did not know how it had been done even after the war had ended. The work of Flotilla III in covering the battle fleet with a smoke screen was extremely fine. The initiative of the G–88, V–73, and S–32 in making a destroyer attack even after recalled is worthy of very high praise.

One of these torpedoes hit the *Marlborough*, and created a moral effect very favorable to the Germans when the later attacks were pushed home. It would appear that the recall was ordered too soon; that one flotilla should have pushed home an attack and a second been held in readiness should the British have stood on.

It is very strongly urged that Jellicoe should have closed the range and followed the Germans in their retirement. Had his division leaders changed course eight points to starboard they would still have been much better formed than the Germans as regards gunnery and would have had favorable conditions for dodging torpedoes.

After being hit the *Marlborough* hauled out of the battle line to starboard for a time. It would have been far better had she left the line for good. It is very probable that her injury was the cause of the reduction of speed to 15 knots at 7.20 p. m.; it was certainly the cause of Division 6 getting lost during the night and being still absent at 3.00 a. m. of 1 June, a fact that might have influenced Jellicoe in his decision to avoid action at that time.

The Second Light Cruiser Squadron did splendid work in maintaining contact with the High Sea Fleet after it had turned away.

It came under a heavy fire, but again demonstrated the fact that light cruisers, if properly handled, can avoid the gunfire of battleships at comparatively short ranges. At 7.00 the *Iron Duke* received a dispatch from the Second Light Cruiser Squadron stating that the Germans were again coming to the eastward. Jellicoe by sending individual signals to his squadron endeavored to form his somewhat scattered divisions. He made no attempt to close the range or order a destroyer attack, a perfect opportunity for which was now presented.

Whatever view is taken of Scheer's return to the attack, it must be agreed that it was a most remarkable and daring move. It was one which would be entirely unsuspected by the enemy. His reasons, as stated in his book, are not given with sufficient clearness to determine his real motives. Was he really anxious for a fight to a finish? Did he see that he was caught by a far superior foe and out of pure desperation make a bold attack upon the enemy to allow his fleet to get clear? Did he attempt to get past the rear of the British line, a move he could have accomplished had he steered northeast instead of east?

The results of his return to the attack are difficult to estimate. His ships received many hits without being able to make any effective return. On the other hand, the moral effect of the whole operation, including the destroyer attacks, was very favorable to the Germans, in that it caused the British to thereafter give them a bridge of gold to their bases. Possibly the destroyer flotillas, supported by Scouting Divisions I and II could have accomplished the same results without endangering the battleships. Who can say?

This writer is not disposed to criticise a leader who deliberately makes a daring offensive advance on a fleet twice his own in fighting strength. He can but wish that this offensive spirit, applied possibly with somewhat more skill, will be always present in our own fleet.

The British battle line was poorly disposed to meet Scheer's advance. At 7.15 the Fifth Battle Squadron was only 11,000 yards distant from the leading German division; Division 1 was distant 20,000 yards from the same unit. The British line of bearing was about 45° from the bearing of the enemy. Had it been normal the German losses would have been far greater.

A glance through the British record of signals will show that far too many unimportant signals were being sent by the British. This would have a tendency to consume the time of flag and staff officers who might better have been gaining information of the enemy and taking proper measures to meet him. It also resulted in really important signals being delayed.

During all this period the air was was being filled with reports of German submarines, which must appear somewhat ludicrous now that it is known that none were present. As an example, imagine the effect of this alarming signal "7.00 King George V to C-in-C. There is a submarine ahead of you." Such reports doubtless induced Beatty to order his destroyers to form a submarine screen at 7.00 p. m., at the very instant when they had splendid opportunities for attack on the enemy battleships.

In examining the course of the action, one gets the impression that Jellicoe could exert practically no control over his forces, while on the other hand, Scheer could not only perform complicated maneuvers with his battle fleet, but could count with certainty upon the cooperation and support of his battle cruisers, light cruisers, and destroyers at all times. This was partly due to the fact that his fleet was much smaller than the Grand Fleet. The larger a force becomes the more difficult it is to direct and control, and thus any force, as it increases in size, becomes less effective ship for ship. Do we not, therefore, reach a point where a further increase in size in a force in an action is not an advantage, but perhaps a disadvantage. Perhaps Jellicoe might have done better with eight less battleships; certainly he would have been well rid of his two cruiser squadrons. Often a small compact mobile force has beaten a large unwieldly sluggish one.

XIV. The Retirement of the High Sea Fleet.
(Figs. 21, 22, and 23.)

Scheer carried out his second retirement with the same splendid precision of the first. But, whereas he had covered the first with only one destroyer flotilla, this time he ordered in the battle cruisers, light cruisers, and all the destroyer flotillas. This use of the battle cruisers exposed them to an overwhelming concentration and it seems a miracle that the *Derfflinger* and *Seydlitz* were not lost. It is not considered that this use of the battle cruisers was justified. However, if it proved a mistake, it was on the right side; that is, it was due to overboldness, not weakness or vacillation.

The destroyer attacks were supported only at their beginning by the fire of the battle fleet; thereafter they received some support from the battle cruisers, but none from the battle fleet. They can therefore be considered as unsupported attacks, and as such were pushed home as far as could be expected; the torpedo fire was good. Had the British not turned away, it is probable that several hits would have been made.

It is not considered that the British commander in chief was justified in turning away from the German destroyer attack; he could have well afforded to receive six torpedo hits, which might

have put three ships out of his battle line. It is not considered probable that the Germans could have scored more than six hits as a maximum.

In his letter of 30 October, 1914, Jellicoe had laid down the following tactical principle: "If, for instance, the enemy's battle fleet were to turn away from an advancing fleet, I should assume that the intention was to lead us over mines *and submarines*, *and should decline to be so drawn*." (Jellicoe's italics.) It is evident that the admiral had steadfastly followed his preconceived plan and was employing tactics specifically approved by the British Admiralty, which must accept full responsibility for them.

If the above system of tactics was to be followed, it is difficult to see how the Germans were ever to be brought to action unless some form of a divided attack were to be used by the Grand Fleet. This form of attack could have been used in two ways. Burney and Evan-Thomas at the end of the line had a combined force of 11 battleships and could have counted on the support of 4 light cruisers and 3 destroyers flotillas. This force could have turned to the westward during the lull in the action between 6:40 and 7:00 and have prevented the second German retirement. These 11 ships, including 3 of the newest type, could have maintained an action with the German Battle Fleet for some time and, even in case of their being beaten, have disengaged themselves by sending in destroyers.

At the other end of the line Jerram could have joined Beatty, giving a combined force of 16 capital ships; they could have been supported by 13 light cruisers, 5 cruisers, and 3 destroyers flotillas. This force also could have sustained an action with the entire High Sea Fleet for some time, and in case of being beaten had to retire only a few miles to gain the support of the remainder of the Grand Fleet.

As a third alternative both these forces could have been detached at the same time, while Jellicoe kept one battle squadron under his direct command in the center. If it were decided that the entire battle fleet was not to follow the enemy in a retirement, it is strongly believed that one of the above forms of a divided attack should have been used.

Even if no attempt was made to renew the action with the battle fleet, why was no destroyer attack ordered? It seems almost incredible that nothing was done, especially as the destroyers at the rear of the line were in a perfect position. See the position of the Twelfth Flotilla in Figure 20.

A great point has been made over the fact that at 7:47 p. m. Beatty sent the following signal: "Urgent. Submit van of battleships follow battle cruisers. We can then cut off the whole of enemy's battle fleet.

The *Iron Duke* received the signal at 7:54. At 8:00 Jellicoe headed directly toward the Germans. He therefore acted in complete accordance with Beatty's signal, which would have meant something had it been sent an hour earlier. Jellicoe was unable to get into touch with Beatty because of the intervening distance and because Beatty was steaming at 18 knots and Jellicoe at 15. The reason for this slow speed is unknown, but is assumed that as much speed as possible was being made.

Beatty did get into close contact with the High Sea Fleet at 8:20 p. m. but was compelled to draw off. It would have been impossible for the van of the battle fleet to have got to within supporting distance of Beatty by 8:20. The mistake was not made at this time; the failure of the British to close in at 6:35 and 7:15 made it too late when this was attempted at 8:00.

A comparison of the heavy hits made by the British and Germans from 6:00 to 8:30 p. m. will be of interest.

The total number of heavy hits received by the German ships which did not sink was 74, including one on the light cruiser *Pillau*. Allowing 17 hits for the *Lutzow* and 15 for the *Wiesbaden*, we get a total of 106. Subtracting the 26 hits received previous to 6:00 we have 80 hits for the period under consideration.

The following is an estimate of the heavy hits received by the British during the period from 6:00 to 8:30.

Lion	2
Princess Royal	2
Warspite	5
Colossus	2
Invincible	8
Indomitable	1
Defense	0
Warrior	18
Calliope	1
Total	65

The British had, therefore, somewhat the better of the main engagement as far as hits are concerned. This was to have been expected, as they had far superior forces in action and had the advantage of very much better visibility conditions. Both British and Germans had one ship hit by a torpedo.

The total heavy hits for the entire day action were as follows:

Received by Germans	106
Received by British	113

XV. Operations During the Night.

(Figs. 24–30.)

After his encounter with Beatty, at about 8:30 p. m. Scheer reformed the High Sea Fleet and headed for Horn Reefs, determined

to fight his way through any opposition encountered. The battleships were formed in single column, a satisfactory low visibility formation. Two battle cruisers took station in the van and two in the rear. Three destroyer flotillas were sent ahead to clear the way. The fact that none of them located the British Battle Fleet demonstrates the difficulty of night searching preparatory to destroyer attacks.

Flotilla II reported that it was unable to fight its way through the British light forces, and therefore returned through the Skagerrak. This decision is not concurred in, as destroyers at night should be able to fight their way through any opposition. Had Scheer been compelled to fight the next morning, the absence of 10 destroyers, all of the largest type and undamaged, would have proved a very grave disadvantage.

Jellicoe decided to head to the southward during the night so as to be in a position to offer battle at daylight the next morning. He decided not to risk a fleet action at night. This decision is concurred in, because of the admitted superiority of the Germans in night gunnery.

The battle fleet was formed in line of squadrons, a poor low-visibility formation. If the wing squadrons had been retired, so as to allow at least two squadrons to fire in any direction, the formation would have been much better. It was fortunate for the British that the Germans did not encounter them during the night. The interval of only 1 mile between squadron columns would have prevented the British Battle Fleet from deploying.

At 9.27 p. m. Jellicoe sent the following signal: "Destroyers take station astern of battle fleet 5 miles." It seems simply astounding that these destroyers, practically all of which had yet to fire a gun or torpedo, were not ordered to attack the enemy. A better opportunity could not have been offered.

In his book Admiral Jellicoe writes: "In the first place, such a course must have inevitably led to our battle fleet being the object of attack by a large destroyer force throughout the night. No senior officer would willingly court such an attack, even if our battleships were equipped with the best searchlights and the best arrangements for the control of the searchlight and the gunfire at night." Now while Jellicoe took great pains to avoid a destroyer attack, he did not even think to make such an attack on the enemy, who deliberately courted it and even steamed directly through the British destroyers, so that they were forced to attack. Witness the statement of the *Ardent:* "*It was too late to get away, so I attacked immediately* and fired a torpedo from a favorable position at the leader."

It might be considered that Scheer was overbold in thus running the gauntlet of the British destroyers. But he might just as well

have run into them on any other course, unless he had made a very wide detour to the westward. In this case he would not have been able to have gained the shelter of his minefields until late on 1 June. Furthermore, although the British destroyers probably inflicted more losses on the Germans than they themselves received in the night attacks, they became separated from the battle fleet in carrying them out and this influenced Jellicoe to decline battle on 1 June. Thus, everything considerd, the British destroyer attacks actually had a very unfavorable effect, although with another commander this effect might not have resulted.

All accounts agree in praising most highly the star shells, the searchlights, the searchlight control, and the night gunnery of the Germans.

The poorness of the British recognition signals was demonstrated by the numerous cases of British ships being unable to determine the identity of ships sighted. A notable instance was the failure to fire upon the *Moltke*, which was at least once and probably twice under the guns of a battle squadron.

The work of radio compass stations in informing Jellicoe of the positions of German ships was splendid; the deciphering of German messages was nothing short of marvelous. Both these phases of radio deserve our most thorough attention.

The fact that the entire High Sea Fleet passed over three British submarines without their knowing it is a forceful illustration of the limitations of this type of vessel. The commanding officers and crews of the British submarines were considered by many the best in the world.

XVI. The Harwich Force.

In Admiral Jellicoe's letter of 30 October, 1914, there is the following paragraph: "It will, however, be very desirable that *all* available ships and torpedo craft should be ordered to the position of the fleet action as soon as it is known to be imminent, as the presence of even Third Fleet vessels after the action or toward its conclusion may prove of great assistance in rendering the victory shattering and complete."

Despite the fact that the Admiralty had approved this letter in writing the Third Battle Squadron and the Third Cruiser Squadron were held at the mouth of the Thames, and the Harwich force, which had proceeded to sea on the initiative of its commander, was ordered back into port immediately. No explanation of the above facts has been offered.

XVII. Conclusion.

During the World War we were told that many things would win the war; money, food, merchant ships, chemicals, ammunition, aircraft, and mere weight of naval superiority.

I will be well content if this paper has demonstrated just one simple proposition, which was lost sight of by some people with a very sad result. There is only one thing which can win a war. That is *fighting*.

STEAM-DRIVEN SUBMARINES.

Source: Reliable. (Translation From an Article by Julius Mugler, a German Inventor.)

Description.

It has been repeatedly attempted to employ steam as a motive power for submarines, but these attempts have never had satisfactory results. And still development forces one anew to the use of steam because with all the motive forces known up to the present (the Diesel motors) a speed exceeding 20 nautical miles can scarcely be attained if certain defensive and offensive properties of the boat are not sacrificed to the attainment of such a performance (efficiency) for Diesel motors, as, for example, is required for a speed of 25 nautical miles.

Among other things, the use of steam in submarines presents special difficulties, i. e., the control during submersion of the heat coming from the steam generators and its detrimental and unpleasant effect on the crew, and also the limitation of the heat waste (in so far as steam is employed as motive agent under water) to a reasonable degree.

The invention here presented, by means of a practical utilization of the steam generator, presents the possibility of overcoming the above-named difficulties and permits, besides, a favorable utilization of space which is of advantage to the entire boat construction, and it also furnishes the most perfect utilization possible of the heat available for the underwater operation, even when underwater steam is employed as propelling agent. For this reason the steam generator (for over-water operation) is not located in the interior of the boat, but in special tanks operated from the interior of the boat, but which are built in the inner body of the boat (with compressive strength) in such a way that they extend into the interior somewhat but lie for the most part in the outer body of the ship.

These tanks can either be made with compressive strength, and must be so made if steam is to be employed as propelling agent not only for overwater but also for underwater operation, or they are built without compressive strength and serve at the same time as emersion tanks if steam is sacrificed as a propelling agent for underwater operation. In the latter instance a portion of the walls of the tanks serve at the same time as the walls of the outer ship and

part as the curving wall of the inner body. Also a portion of the outer ship used as emersion tanks will be made into a boiler room (and boilers are successfully made which are folded during submersion).

In both cases, the arrangement of the steam generators, as far as the interior body of the boat is concerned, can be made alternately on the starboard and port side, as, for example, illustrate for an arrangement without compressive strength. The sections through the pressure body, in which for practical purposes the engine rooms are located, are arranged along the ship's longitudinal axis and opposite each other. They lie laterally next to the steam generating rooms. However, only so much of an alteration or change is made so that the sections through the pressure body only notch (together) to the extent that it is possible to have a connecting door. This arrangement makes it possible to use the steam plant also for comparatively small boats without the boiler being too small or unpractical. And this provides a systematic arrangement favorable for the stability.

The walls of the tanks, in so far as the latter are made with compressive strength, are constructed double, and the middle room between the two walls is evacuated in the well-known way for the purpose of heat isolation. If the tanks are not made with compressive strength, a normal isolation is sufficient, since in submersion the heat is destroyed in the steam generators.

Since it is often difficult to retain the evacuation of the middle room between the walls for a length of time, and often is not absolutely necessary, especially if the space between the steam generator and the wall of the tank will not be used as a steam retainer, it can also be cooled by sea water in so far as it separates the interior of the ship from the steam generator tank, and this sea water, on account of the warming, circulates from below to above or by means of artificial air circulation.

While on the surface the ventilator can absorb the cool air from outside and again force it out, during submersion this must be taken from the inner room and then brought back again. It must be cooled, however, before it is returned, since otherwise the desired purpose of keeping off the heat of the boilers from the inner rooms and making these rooms bearable will be entirely defeated. For this purpose the cooling system has been arranged in the room which is formed by the double walls, and on this cooling system the air can again give off the heat taken from the walls before it returns to the inner room again through the opening.

If the steam is also to be used as a propelling agent underwater, then the room between the steam generator and the tank wall with

compressive strength is used as the necessary steam retainer. Moreover, the steam generator is surrounded by an inclosing mantel which forms the interior casing of the steam retainer for underwater operation, while the inner wall of the tank at the same time forms the outer casing of the steam retainer. If the cylinder room between the walls is not sufficiently large for the steam retainer the space between the head walls can be used as on the left half.

In order to utilize to the fullest degree the products of the steam generator for the heating of the steam retainer before exit into the chimney, this is directed through a pipe which is laid in the steam retainer. In order, furthermore, to arrange for the easy repair of the boiler, this boiler (when overhauling is necessary) can be partially or entirely drawn out of the surrounding mantel in the firing room. This will be made possible by the inner part of the front head wall of the steam retainer remaining open or being only slightly covered, and finally during the underwater operation, after the consumption of the steam still in the boiler, in order to prevent a reversal of the steam taken from the retainer and to simplify the canalization from the steam retainer to the steam turbine as well as making it possible to do without a specially large steam collector for the steam retainer, the steam retainer is directly connected with the steam chamber of the steam generator by a pipe canalization which can be shut off, so that the steam taken from the steam retainer always passes through the steam room of the steam generator.

The very special advantages of this new construction of the steam generating plant are as follows:

The steam generating rooms are completely separated from the actual interior of the ship and do not need to be passed in going from the ship rooms situated in front of and behind them.

The heat coming from the boilers is kept away from the inner rooms of the ship so that it does not incommode the crew.

The boiler rooms do not need to be, or rather can not be, entered after the beginning of the underwater operation. (That is, after submersion.)

The utilization of space is extraordinarily practical and advantageous; first, through the fact that the steam retainer for underwater operation is laid around the steam generator for overwater operation, whereby heat from the steam generator streaming out during the operation is of advantage to the steam retainer during overwater operation; and also through the fact that the machine room as is shown can be located between the steam generating rooms or next to them. Through this arrangement the general length of the boat is decreased to a significant degree, for should the steam generator be placed in the territory of the pressure body, either in dry rooms or flooded ones, and the machines, as is usual, lie behind this,

this causes a great increase in the length of the inner body, and by the employment of diving boilers will mean an exceptionally unfavorable increase in the displacement, very disadvantageous for the speed and operation of the boat. In the arrangement described above the steam generators, on the contrary, by means of this lateral arrangement will be situated at a place which will have no effect on the length of the boat, and among other points the room of the inner body of the boat, which is otherwise employed for the steam generator, is therefore free for the machinery.

The location of the steam generating room at starboard and port permits the employment of steam as propelling agent even for comparatively small boats.

The taking off of the exhaust gas through the steam retainer makes it possible to utilize the heat (otherwise wasted with the exhaust) for the underwater operation.

The taking of the steam from the steam retainer out over the steam room of the steam generator for overwater operation simplifies the canalization system, saves an especially large room for the steam retainer, and renders the entire operation extraordinarily simple, especially in the transition from underwater to overwater operation.

Claims.

(1) Submarines with steam operation, characterized by the placing of the steam generators in special tanks with compressive strength, which tanks are built laterally along the inner pressure body of the boat so that they are partially situated in the outer ship.

(2) Submarines with steam operation, according to claim 1 above, are characterized by the steam generators being placed in rooms of the diving tanks of the outer ship, which are without compressive strength.

(3) Submarines with steam operation, according to claims 1 and 2, are characterized by the steam generators being arranged alternately on the starboard and port sides, whereby the pressure body sections in relation to the ship's longitudinal axis are placed opposite one another in such a way that the machine rooms located in the sections of the pressure body lie laterally next the rooms of the steam generators.

(4) Submarines with steam operation, according to claims 1 and 3, are characterized by having the room between the steam generators for superwater operation and the walls of the steam generator tanks (with compressive strength) utilized as steam generator (steam retainer) for underwater operation.

(5) Submarines with steam operation, according to claims 1, 3, and 4, are characterized by having the exhaust gas of the boiler for

overwater operation carried off in pipes through the surrounding steam retainer, before going to the chimney (funnel).

(6) Submarines with steam operation, according to claims 1, 3, 4, and 5, are characterized by taking the steam out of the steam retainer, for overwater operation, out over the steam rooms of the boiler for overwater operation by means of pipes.

(7) Submarines with steam operation, according to claims 1, 2, and 3, are characterized by the room between the double walls, separating the steam generator tanks from the inner rooms of the boat, being cooled through an artificial air circulation.

(8) Submarines with steam operation, according to claims 1, 2, 3, and 7, are characterized by a cooling system being placed in the rooms lying between the double walls, by which system the air circulating through the rooms and becoming warm thereby is again cooled before it returns into the inner body of the boat.

TRADE CONDITIONS IN RUSSIA.

Source: Reliable.

October, 1921.

On October 6, 1921, I had an interview with Ignatius Yourin, foreign minister of the Far Eastern Republic; this interview lasted two hours and the substance of Yourin's statements is as follows:

The Far Eastern Republic has in the past suffered a great deal, due to the disordered conditions in her territory, but now having more or less put her own house in order the Far Eastern Republic is about to enter into a new era of her development, namely, relations with foreign governments.

The Far Eastern Republic realizes that it is of vital importance to her to obtain trade relations with foreign countries and she does not want to be at the complete mercy of the Japanese in this respect. Therefore the Far Eastern Republic has repeatedly requested the United States Government to allow her to send trade commissioners to the United States in order to interest American capitalists in the development of her wonderful resources.

The attitude of the United States towards the Far Eastern Government has been a source of great chagrin to her nationals and one that can not be understood; for the Far Eastern Republic is very pro-American and pro-British and hates the Japanese to the same degree that every oriental does who inhabits the Asiatic mainland.

Mr. Yourin himself and all the officials of his Government were greatly impressed with the personality of Mr. Abbott and Col. Davis, who visited Chita some three months ago. Mr. Yourin explained the whole situation to these two gentlemen and stated that in the course of a few months the Japanese intended calling a conference at which they would impose certain conditions on the Far Eastern

Republic, which the latter, if unaided by either the United States or Great Britain, would be compelled to accept.

Yourin figures that Abbott has been in the United States at least three weeks and during this period he has continuously hoped to receive the news that the United States would come to the moral support of his Government.

Yourin stated that during the recent Dalny conference it was very evident that the Japanese were determined to obtain a strong hold in Siberia and if possible obtain special concessions and privileges prior to the meeting of the Washington conference. Yourin pointed out the fact that the Japanese were most eager to entrench themselves in Northern Saghalien and also in the Amur and Sungari River districts.

He asked me to convey to the Navy Department the fear that he entertained regarding the Japanese obtaining control of the rich oil deposits and coking coal fields in North Saghalien.

Yourin felt certain that the haste with which the Japanese desired to conclude agreements with the Chita Government was not only prompted by their desire to obtain special economic privileges in Siberia prior to the meeting of the Washington conference, but also due to the fact that Japan was in a hurry to consolidate her military occupation of the country.

The Chita Government has now reached that state where it must have trade relations with other countries and undoubtedly will come to an agreement with the Japanese which will result in the latter obtaining a dominating and economic position in Siberia.

Yourin regrets that he is forced to play into the hands of the Japanese but he blames the actions of the American and English Governments who, having failed to give his government any support whatever, have precipitated a condition which will make Japan all powerful in Siberia.

Yourin is a short, thick-set man between 45 and 50, partially bald but heavily bearded. He is of the fair-haired Russian peasant type, but is evidently well educated and speaks French fluently, a little German, and has a reading knowledge of English. In appearance his resemblance to Jesus Christ is remarkable.

His real name is Dzevaltovsky. He is of Polish origin but is a native of Petrograd. Under the Imperial régime he was a commissioned officer in the Imperial Guards (major ?).

He was a revolutionary propagandist in his regiment and worked for the overthrow of the Imperial government. Then during the Kerensky offensive on the Galician front in 1917 he became a very important figure in the rebellion against the Kerensky government, taking action at the front which is said to have decided the army's attitude and which made possible the bolshevik coup d'etat. His

services were recognized by the Soviet and he was appointed director of military education in Russia and was put in direct charge of all military schools. His record from that time to the present is unknown.

It is not for this office to make any suggestion as to the policy which the United States should adopt in Russian affairs but, looking at the situation from a military point of view, it is certainly correct to state that no efforts should be spared by the United States in attempting to thwart the plans of her most probable enemy—Japan—in consolidating its military and economic position in Siberia.

During my interview with Yourin I explained to him that never having been in Russia I was probably most ignorant in Russian affairs, inasmuch as my only experience with Russians had been on a short trip a few years ago which I made from Harbin to Vladivostok; I therefore asked him if he would kindly explain to me the difference between the principles of government as administered by Chita and Moscow. He stated that this was very difficult to explain, and rambled on in a desperate attempt to show that Chita was not bolshevik but on the other hand not anti-Soviet.

This office has obtained from excellent authority the statement that Yourin is making every attempt to spread bolshevik propaganda in China. He has told the Chinese that the only solution to their present financial state is a complete repudiation of all foreign obligations, for, as Yourin says, "we did the same in Russia and you have only to see the fine results in our country of such an action."

It is the opinion of this office that if the United States makes any overtures to the Chita Government it should fully realize that it is dealing with a bolshevik government as thoroughly "sovietized" as the present Moscow régime.

Japan to-day controls the eastern seacoast of the Asiatic mainland from the port of Narami in Korea to the island of Formosa, with the single exception of the port of Shanghai, and unless the United States gives the Chita Government a support of some kind the Japanese will obtain a dominating control of the coast to the north of Narami as far as Nikolaievsk at the mouth of the Amur River.

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 2—1922.

15 FEBRUARY, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1922.

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 2—1922—15 FEBRUARY, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

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ARGENTINE SUBMARINES: REACTION OF BRAZIL.

Source: Reliable.

22 December, 1921.

Brazil has received positive information that Argentina has four new cruising type submarines, now completed. The information is to the effect that they were fabricated in Germany, shipped to Argentina in parts and erected in Argentina by German personnel.

This news has produced an irritating effect on Brazilian officials who believe that the above could not have happened without Allied connivance. It has caused Brazil to become more active in its efforts to increase its fleet, particularly in view of the threatened prohibition of construction for foreign account contained in the armament limitation agreement. Brazilian officials agree that if this goes through they will have to induce some foreign building firm of experience to set up a building plant here.

BRITISH COUNTER-ESPIONAGE DURING THE WAR.

Source: Sir Basil Thomson (Chief of Criminal Investigation Department).

17 January, 1922.

The credit for the discovery of the spy organization was due to a department unconnected with the police, directed by officers of great skill, who brought the result of their investigations to me whenever executive action in London became necessary. It was to these discoveries that we owe the safety of the Expeditionary Force when crossing the Channel, and perhaps even the preservation of the Channel ports; for if any remnant of the German organization had been left at liberty in August, 1914, we know from Von Tirpitz that submarines would have been sent to deal with our transports in the Channel.

According to Mr. Felstead in his "German Spies at Bay," it had been known for some weeks before the war that one, Karl Gustav Ernst a barber in the Caledonian road, who was British only because he happened to be born in England, was the central post office for all German espionage papers. All he had to do for his pittance of 20s. a month was to drop the letters he received, ready stamped with English postage stamps, into the nearest pillar-box. In this way the names and addresses of no less than 22 spies were compiled, and the arrangements were so complete that on the very day of the declaration of war, 21 of the 22 agents were arrested and

interned simultaneously, and one only eluded arrest by embarking for Germany. And so at the vital moment of mobilization the curtain fell over England, the German intelligence could only guess at what was happening behind it, and they guessed wrong.

Ernst was sentenced to seven years' penal servitude for his share in the business, and seeing that he was a British subject, the sentence can not be called excessive.

When historians of the Great War examine their materials, they will give a very high place to Lord Haldane, whose mobilization scheme made the dispatch of the Expeditionary Force possible before the Germans came to know about it; who himself sent out the mobilization order at the psychological moment. The railways worked admirably, discharging their men, horses, and material at the quays without any confusion at intervals of 10 minutes by day and night.

Our great dread during the first week was the blowing up of a bridge or a railway arch. Most of the railway arches were let to private persons, some of them aliens. On August 5 I went myself to the War Office to find a general who had, or could be vested with, power to turn these people out. There was a good deal of confusion, because nearly every head of branch had left for the field that morning and their successors were quite new to their jobs. In the middle of my interview it grew dark, there was a sudden peal of thunder like an explosion, and the general said quite gravely, "A Zepp!" That was the state of mind we were all in. About midnight my telephone became agitated; it reported the blowing up of a culvert near Aldershot and of a railway bridge in Kent. I had scarcely reported these occurrences to the proper authority when the bell rang again to tell me that both reports were the figments of the brain of some jumpy Reservist patrol.

During the early months of the war the special branch was maid-of-all-work to all the departments. Being the only department with a trained outdoor staff it was called upon to deal with every kind of work, from the regulation of carrier pigeons to the strange behavior of a Swiss waiter who was seen to be making a plan of the tables in a restaurant on the back of a menu. The spy mania was in full blast. One could not afford to neglect a single denunciation, however foolish, because the nervous state of the public was itself a danger. We were inundated with letters, and no one left the office before midnight. No one who fed a pigeon or showed a naked light or used a noisy typewriter that sounded like a wireless transmitter was safe, and the more credulous the informer the more dangerous it was to treat him with levity.

The excitement threw many people temporarily off their mental balance. A woman, accompanied by a military officer who believed

in her, would be convinced that she was being followed by aliens, and only a promise that the police would follow her themselves and detain the alien would allay her fears. Special constables and naval and military officers were busy as amateur spy catchers all over the country. If a telegraphist was sent on a motorcycle to examine and test the telegraph poles another cyclist was sure to be sent by someone in pursuit. Once a certain department sent out a car equipped with a wireless receiving apparatus to pick up any illicit wireless conversations that might be passing over the North Sea. A few hours later came a telegram that a car containing two German spies and a wireless apparatus had been caught in Essex. Their release was effected by telegram, but within an hour they were in custody again on the border of the country. This time they declined to proceed without a military officer in uniform. But all to no purpose, for next morning a message came from the next country reporting the arrest of "three" enemy spies, of whom one was disguised in a British uniform.

I myself when motoring from Folkstone with Lord Montagu of Beaulieu was held up and examined 24 times between Folkstone and London.

The criminal investigation department was called upon to provide trained men for the "personnel" of the Intelligence Corps in France. These trained detectives were the nucleus of what afterwards became an important body—the intelligence police, who took control of the passenger traffic at the ports and counterespionage on the lines of communication. Several of them obtained commissions, reverting quite cheerfully in the rank of sergeant of police after the armistice. One of them, whose work in London had been the detection of white-slave traffickers, was detailed to protect the commander in chief, Lord French. In the street at general headquarters he saw a familiar face which he remembered as belonging to a Swiss whose deportation from England he had secured. He followed the man straight to Lord French's house and taxed him with his identity on the very doorstep. There, at least, one would have said that the capture was important; but no! The man turned out to have been engaged, in ignorance of his unsavoury character, as an assistant to the cook.

But our chief preoccupation throughout the war was the German spy. With his entire organization in ruin at the vital moment of our mobilization, the German intelligence chiefs, both naval and military, lost very little time in sending others. Now, spies belong to two categories, the patriotic and the hireling, and I have never felt easy in my mind about the justice or even the policy of executing the patriotic spy. He is serving his country no less than the soldier in the field. His reports may turn the scale to victory; he must have a double measure of courage and resource. On the hireling spy, espe-

cially if he is a neutral who for personal gains joins in a quarrel in which his country is not concerned, I would have no mercy. Carl Lody and Anton Kupferie both belonged to the patriotic category; the former was shot in the Tower and the latter escaped execution only by committing suicide in prison. The counterespionage officers were conspicuously successful in the first fortnight of June, 1915, capturing and bringing to justice no fewer than seven enemy spies who, however, to say the truth, were very clumsy in their methods. Out of the 20 or so spies who were convicted two were professional musicians and one music-hall artist.

I remember an intelligence officer saying to me at the outbreak of war: "We shall repeat the history of the Napoleonic war. We begin with the worst intelligence service in Europe and we shall end with the best." Most certainly we beat the Germans at the business. They had order and method and industry, but they failed in the one thing needful—intuition and imagination. They chose their men badly; they sent them out imperfectly trained; the jealousy between the two services led the German naval intelligence to enter into a fatal competition with the military; and they were absurdly easy to gull with incorrect information. They even allowed one of my own agents to take service under them. No tale, no faked photograph, was too crude to take them in. In only one department was their intelligence good, and that was behind the fighting line, but even there probably ours was better.

When you come to think of it not many private Englishmen were in a position to give military or naval information of importance, and still less a foreigner, who did not dare to ask questions. In the early days of the war we may not always have been very careful about the people we appointed. For example, it was reported that a gentleman who had escaped from private restraint was accepted as interpreter on a cruiser, the appointment being canceled on the arrival of the medical man who was in charge of him. It is also apparently true that the notorious Tribitch Lincoln was employed for a few weeks in the Censor's office; but that was before he had taken to espionage. It is also true that throughout the war there was no case of an Englishman turning traitor in England. The only British subject who got into trouble was of foreign parentage, if we exclude the Irishmen, most of whom were associated with Roger Casement.

If the Germans got little that was useful to them from their spies, it is believed that they got a good deal that was useful to us. What the French called the "agent double" ran to and fro between all belligerent countries. Spies do not belong to a savory class of humanity, but one must remember to do them justice, that when a spy finds the net closing around him to go over to the other side

may be the only means of saving his life, and if some of these men carried information to the enemy that was not strictly in accord with the truth one can only blame the Germans for their credulity. To do the Germans justice, it is said that they paid quite liberally for this class of information. A few men deliberately entered the service of the Germans with the intention of coming over to serve the Allies. The difficulty was to keep them furnished with "information" to give to the enemy. It had to be partly true, or if incorrect sufficiently in accordance with probabilities to be credible.

Our real business was the internal safety of the country. There is an armchair in my office in which every spy, real or fancied, sat while he was accounting for his movements. It was realized in the first weeks of the war by the law officers and judges, as well as by the laity, that the ordinary criminal procedure was of no avail against spies. If no questions could be asked of a person under arrest, how were you to piece together the documents in his possession—marked dictionaries, memoranda of addresses, code telegrams, and the like? The only way, and to the innocent the fairest, was to adopt something like the French criminal procedure. There was never anything approaching what is called in America "the third degree."

On the average four persons a day sat in that chair throughout the war. They were cautioned that they need not answer any question, but that what they said might be used in evidence against them—a caution which almost invariably induced loquacity—and questions and answers were recorded in shorthand. At least 9 out of every 10 persons who might otherwise have been detained under suspicion for an indefinite period were cleared of all suspicion by the examination. It used to be a joke among my staff that no single person, however angry he was when he came in, left the room without thanking me profusely, though one Mexican did afterwards make a claim for £10,000 for "moral and intellectual" damages."

I made a discovery about that low armchair. For some time I had noticed that whenever a particularly disconcerting question was put the suspect instinctively raised himself by the arms to reply. My assistant, in peace time an eminent K. C., suggested on one day that I should sit in it and be interrogated. I felt at once an irresistible impulse to raise my face to the level of his. Roger Casement, I remember, rose and sat on the corner of my table. In fact, if you want to get the truth out of a witness the worst way is to put him in a box above the level of the cross-examining counsel; if our law courts were intelligently constructed the cross-examiner should take his stand in a lift and be suddenly elevated to the proper position just before his cross-examination begins. Primitive

races have found this out, for their chiefs stand erect while their inferiors squat on the ground when they are being questioned.

There were many curious and a few dramatic incidents during these examinations, too long for these columns. The Germans had been using as spies people belonging to traveling circuses and shows, as less likely to invite suspicion than the pseudo-commercial travelers, on which we had taken a heavy toll. Consequently, the censors kept a sharp lookout for messages from such people. One day a telegram to a world-famous American show announced that the sender was ready to book his passage to New York. He was invited to call, the stage was set, the chair was ready, and there walked into the room a blue man. He was a sort of light indigo all over, and, set off with a heavy red mustache, he was a really terrifying spectacle. If we were surprised we did not show it; all we dreaded was the emotion of the stenographer when she would steal a glance at the object sitting beside her. The moment came. She leaped a foot from her chair with a little sob. He turned out to be an ex-cavalry sergeant who had turned blue after his discharge and got his living honorably as a blue man. The stenographer was accustomed to men of color, but never of that particular shade.

We had always expected that the enemy would attempt to flood the country with forged treasury notes, and so shake the public confidence in the new currency. Throughout October and November, 1916, a large number of forged "Bradburys" were foisted on small shopkeepers in London—generally at dusk, but even in the daytime it needed a keen eye to distinguish them. The case was unraveled with admirable patience by the late Chief Inspector Ward, who was afterwards killed by a Zeppelin bomb. It soon became clear that the forgers were ordinary criminals, and the utterer could have been arrested at any moment; indeed, one of our people purchased notes from him and pretended to pass them, but actually substituted good currency, with which we had to supply him. But all his attempts to get an introduction to his printer failed; the intermediary, an ex-convict named Elliot, was far too wide-awake. It was quite useless to attempt to "shadow" such a person. But it was difficult to be patient when the forgeries were improving and the number in circulation was more than £60,000. It could not be long before public confidence was shaken.

At last Elliot made a mistake. One night at a little gambling club in an upper room in Jermyn Street a young man walked in and staked amounts of 9s. 6d., which struck our emissary as not improbably the change for the forged 10s. notes. Also his hands were stained with printer's ink. When he had left the room our man entered into a dispute about the name, which he pretended to be sure was Fordyce.

Elliot denied this and at last said he was called Williams. It was a slender clue, but London was scoured for a printer named Williams, and at last in a quiet street in North London we found on a stable door, almost defaced by the weather, the words "Williams, Printer." The next step was to watch this door and see whether Elliot visited it. We engaged a window opposite, and there men sat day after day, until after dark on Friday, November 19, Elliot was seen approaching. He kicked on the door and was admitted; the officers mustered outside. At the end of half an hour out he came, and then the fun began. He fought like a tiger; the street was carpeted with forged Bradburys; the wild-beast howls he emitted in order to warn his confederate inside collected a crowd. When he was safely secured the police climbed over the door. A path led through an archway to a little isolated stable in which a light was burning and a young man was working in his shirt sleeves in placid ignorance of the disturbance outside. It was the best equipped "forger's den" in history—modern machines with a numbering device inserted in the plates, an apparatus for forging the watermark, and a vast store of notes damp from the press. Even the dies of the Lowden forged postage stamps were found.

Next morning I took the Chancellor of the Exchequer and Sir John Bradbury to see the place before it was dismantled. One turned the handle of the press and the other took off the note, being careful to write "Forged" across it before putting it into his pocket—the first instance in history of a Chancellor counterfeiting the currency.

The German tentacles were spread wide, and it was not long before they groped out towards India. They were tampering with the loyalty of the Indian prisoners they had captured and were sending them to Constantinople to be "trained." In Berkeley, Calif., a little band of Indian revolutionaries were printing the "Ghadr" ("Mutiny") under the direction of the notorious Har Dayal, who was wanted in India for murder, and in Berlin an Indian committee had been formed, consisting of German professors who thought they knew India, and Indians who did know, but were careful not to enlighten their German colleagues. Chief among these was Chattopadhya. A vessel had even been chartered by the Germans in California and loaded with munitions for a native rising, but she was successfully headed off and captured in the Malay Archipelago. In October, 1915, we had definite evidence from Switzerland that Chattopadhya was planning the assassination of Lord Kitchener and Sir Edward Grey, and was using for the purpose a young Swiss girl and a German woman married to two revolutionary Indians living in this country. The Swiss girl was detained and all the others were interned.

The investigations demanded much time and patience, but they produced very valuable results. It transpired that about March an Indian chief of no particular importance named Pertabr had sailed from India to Marseilles and had immediately taken the train for Switzerland, where he appeared before the German consul as a "Rajah" ready to do anything against the oppressors of his country. He was a person of exalted personal vanity, and doubtless mental pictures of himself prancing into northern India on a white horse as a conqueror had played havoc with his imagination. So haughty was he that the German consul was ready to lick his boots, and when he stipulated for a personal audience with the Kaiser the consul actually begged him to say a word in his favor to the All Highest. This may be taken as a measure of the German capacity for dealing with native races. The German Government took him at his own valuation and furnished him with a mission of German orientalists and Indian prisoners of war to proceed to Kabul, there to organize an invasion of northern India. Pertabr assured them, and they believed, that the Indian princes would rise to welcome their deliverers. They carried with them autograph letters from the Kaiser. Unfortunately for human hopes, the examination chair in a little room at Scotland Yard had not been untenanted: measures had been taken, and somewhere near the Afghan frontier the mission had broken up and its fragments were wandering about Central Asia. A few months later there came into our hands a very curious example of German enterprise. It was a tiny glass tube, intended to be carried in the body, containing an appeal by the Kaiser to the Indian princess, reduced by photography to almost microscopic size.

But of all these birds of passage I think that the Dutch dancer Matahari was the most interesting. She was bound from Spain to Holland with a "trousseau," and I am pretty certain with a good deal of information stored in her memory. It was a delight to question her, so quick was she in taking up a point. We got really nothing from her except the certainty that she was working for the enemy. When I said, "Madame, we are going to let you go, not to Holland, but back to Spain, and if you will take advice from someone who is nearly twice your age, I will give it to you. Give up what you are doing and never do it again." "Sir," she replied, "I thank you from my heart: I shall take your advice, and you will never regret having given it." And off she went to Spain and did it again.

Within six weeks she was caught on the French side of the frontier with the incriminating evidence upon her. She was sentenced to death by a French court, but with the usual delays she did not suffer death until many months later. Her end at Vincennes was described to me by a French colleague who was present. She had

donned all her best clothes. She walked to the ground as she walked on to the stage—certain of carrying her audience with her. She was a little troubled by the curé who trotted along by her side. "I am grateful to you, Monsieur," she said, "but please don't talk to me." When she came to the place of execution she waved her hand to the assembled troops. She refused to be blindfolded, and she was in the act of waving a welcome to the firing party when the order was given and she fell dead. Perhaps the strain of Malay blood in her, to which she owed much of her grace, had given her a tinge of fatalism, but whatever the cause, she died with a courage that scarcely could have been surpassed.

BRITISH AIRSHIPS AS AIRPLANE CARRIERS.

Source: Reliable.

(15121.)

12 December, 1921.

There seems to be a general scepticism as to the practicability of such airplane carriers as the *Argus* and *Eagle*, so that there is a tendency to look to the airship as possibly presenting the solution of the problem. The action of the Washington Conference in specifically limiting airplane carrier tonnage, but placing no limits upon naval aircraft, has probably increased this tendency.

An airplane may be dropped from an airship without difficulty at any time, but it is necessary to develop some means of picking it up again. The idea of landing an airplane on top of an airship is considered wholly impracticable, but an airplane in flight can be picked up under an airship. It is believed that some arrangement of wire loops suspended from the airship has been worked out by which this can be done.

When an airplane is picked up by an airship, an equal weight of ballast must be released, so that large amounts of ballast must be carried at some stages of a cruise. It is possible that after dropping an airplane the airship could be forced down by the engines to near the sea, so that water could be picked up by some means. Water recovery from the exhaust gases is also a possibility.

Many experts believe in the protection of military or naval airships against incendiary bullets by turning the cooled exhaust gases from the engine into the hull between the gas bags and the outer cover, as proposed by C. P. Burgess in a memorandum to the Bureau of Construction and Repair last summer, in which the problem was analyzed and experiments suggested. The cooling of exhaust gases for this purpose would also give water recovery. An experiment was made at Pulham in which a large box-shaped frame was covered with outer cover fabric, and a gas bag filled with hydrogen was se-

cured by netting inside the box so as to give about 9 inches clearance from the outer fabric. This space was filled with the cooled exhaust from a gasoline engine. Incendiary bullets were then fired through the box and it was found impossible to ignite the hydrogen by this means until such a burst of bullets was concentrated as to tear large holes in the fabrics of the cover and the gas bag.

With satisfactory means of picking up airplanes in flight and provided with water recovery, and protected by the exhaust gases against incendiary bullets, the large airship is considered by its advocates, to have the following advantages as an airplane carrier over carriers of the *Argus* or *Eagle* type:

(*a*) Much higher speed.
(*b*) Greater radius of action.
(*c*) Ability to launch or pick up an airplane in weather when it would be impossible from a surface ship.
(*d*) Security of attack by anything except other aircraft from which she is protected by her own guns and airplanes, in addition to the passive protection of the exhaust gases.
(*e*) Better facility for getting in the first blow in the case of airship and surface ship attacking each other by their airplanes, to be followed, perhaps, by heavy bombs dropped from the airship.
(*f*) No international limitation upon total airship numbers or tonnage.

THE JUTLAND ACTION.

Source: Opinion by Admiral Sir Cyprian A. G. Bridge written to Capt. Frothingham.

Has it ever struck you that many, perhaps most, naval battles have been the subject of animated and often prolonged dispute? Trafalgar, which might have seemed hardly to admit of controversy, was a subject of controversy for a century, at the end of which period I was myself the senior member of a committee appointed to consider it. Rodney's victory of the 12th April, 1782, which seems a fairly decisive one, was hotly disputed by his contemporaries and has often been disputed since. It was much the same with some of Suffren's battles. Indeed, it would be difficult, perhaps impossible, to name one great naval action for more than two centuries as to which the claim to victory has not been contested. Land battles, as far as I have been able to see, have been less seldom made subjects of controversy. Some have certainly been so made. The French always disputed Wellington's right to claim Talavera as a victory; and some Englishmen agreed with them. No doubt you are acquainted with the different views of Waterloo. Every good Prussian believed, or

anyhow asserted, that Wellington and the British Army had been defeated and were saved from utter destruction only by the timely arrival of Blucher and his troops. I am old enough to remember the battles of the Franco-Prussian War of 1870–71. I visited the field of, among others, Gravelotte almost exactly 12 months after it was fought. Bazaine, the French commander in chief was so certain that the French had won that he actually left the field and rode back to his headquarters in Metz. There were also disputes as to the result, the immediate result that is, of later battles. It must, however, be admitted that naval battles are more frequently made subjects of controversy than those on land. We may look for the reason of this in a statement of Admiral Mahan. "A navy," he says, "acts on an element strange to most writers; its members have been from time immemorial a strange race apart, without prophets of their own, neither themselves nor their calling understood."

It is probably owing to this that most shore-going people suppose that a great naval battle is, or at any rate ought to be, like a game of football or a boxing match—a thing which is usually settled in an hour or two, or even a shorter time. To the shore-going mind it is an impossibility to perceive that what decides the result of a battle is the ultimate consequences to the two sides. Sailors, as Mahan says, being "without prophets of their own," have found the absence of such personages made up for by journalists, usually men of good will and often of talent, but rarely, if ever, conversant with the sea and its moods. The "note" or "tone" of lay comment on Jutland was set by the form of the official *communiqué*, first issued in London. What it said was not so important as the form which was given to it. It was foreseen that it would have a misleading effect. Two different friends of mine, who were shown the communiqué before it was issued, urged, but urged in vain, that its form should be altered. They wanted the exact truth to be told, but told in a way that would not mislead people. Unfortunately, the "material school" was all powerful and what was principally thought of was, not the real issue of the action, but the damage to material which it was hoped would, owing to the adoption of passive defence arrangements, be secure against the effects of hostile fire. The destruction of huge ships abundantly furnished with passive protection was such a surprise to the materialists that they did not know whether they were on their heads or their heels. No wonder that inexpert commentators produced an erroneous view of the battle.

If you would care to have my own opinion about Jutland, I will give it. That opinion is, that it was the most decisive naval victory ever won. In it not merely a fleet, but a whole navy was defeated. Its final stage was the procession of surrendering German ships to Scapa Flow. The Germans are nearly unanimous on the point, viz,

that what gave the ultimate victory to the Allies and Associated Powers was the naval blockade. All the world sees that that would have been impossible if the German Navy had not been defeated.

As to Beatty's tactics at Jutland, to me they seem to have been masterly. They appear to have been the result of previous thought and happy inspiration at the moment. He so maneuvered as to get the van portion of the German fleet committeed to an action with him; and he led it when so committed and the following main body towards the Grand Fleet. Like Lord Hawke at Quiberon, he was prepared to stand losses in order to gain the end. The High Sea Fleet availed itself, over and above the use of smoke screens, of the failing light to retire. Does anyone believe that if there had been two or three more hours of daylight it could have so completely escaped notice as to insinuate itself unobserved behind the Grand Fleet and make its way home unseen? Had the ships of the Franco-Spanish Fleet at Trafalgar been possessed of steam power, how many more of them would have escaped than actually did?

The High Sea Fleet, after Jutland, never put to sea except when it was certain that the British fleet would not be encountered. It came out merely, as Nelson expressed it, to "cut a caper." We have positive evidence that, such was the effect of Jutland on the ships' companies of the High Sea Fleet that they made it quite clear to their commander in chief that they would not put to sea again unless they were assured that the British fleet would not be met. It was definitely arranged that it should be so. An extremely interesting book was published some time ago by an author who was in intimate communication with the German ships' companies, and they were positive as to the above. Jutland had completely destroyed the morale of the German Navy in general, though, no doubt there were brilliant exceptions; for example, in the U-boat service.

The talk about the superiority of the German material equipment in certain details is perhaps true; but it is not of great importance. Of course, an immense amount is made of it by the supporters of the "Dictatorship of the materialate," under which we have to live at present. It was, so to speak, "nuts to them."

To say that the High Sea Fleet after Jutland was "in being" to the extent of supporting the German attacks on sea-borne commerce is in flat contradiction of the virtually universal verdict of naval history. I might give you instances throughout the centuries from the days of King Charles II downwards; but I will limit myself to two. What battle fleet in being was there behind the American privateers in the "War of 1812"? What battle fleet in being was there behind the *Sumter*, *Alabama*, and so forth, in the War of Secession?

BRITISH AMPHIBIAN FLYING BOAT.

Source: Reliable.

2 December, 1921.

The Amphibian flying boat, built by the Super-Marine Co., of Southampton, known as the *Seal*, has recently concluded successful landing and flying-off tests on the aircraft carrier *Argus*. This plane was completed by the company about six months ago and, after preliminary trials, was turned over to the Air Ministry Experimental Station, Isle of Grain. The authorities at the Isle of Grain were not satisfied with the machine as regards its directional and lateral stability. The plane was kept at the Isle of Grain about five months and very little work done on it to correct the faults found. With considerable trouble the Super-Marine Co. obtained the return of the plane and proceeded to make modifications towards correcting the faults. These modifications consisted principally in sweeping back the wings a little and adding a little more fin surface to the tail.

The makers of this plane now claim a landing speed of 39 miles an hour, and this seems borne out. The run for taking off is also reported to be very short with an apparent wind of about 25 to 30 miles an hour, as may be found on an 18-knots carrier.

On the completion of these recent trials on board the *Argus*, the air ministry ordered the plane to return to the Isle of Grain for further tests. There is every evidence at present that the plane as a "fleet spotter" is fairly successful and is materially interesting the air ministry.

The price quoted for this plane complete, fitted with a Napier "Lion" engine, high-compression type, is about £8,000 each for two planes, with no question as to purchase of rights for building. This price would be reduced on larger orders.

THE SINKING OF THE HAMPSHIRE.

Source: Sir George Aston.

The *Hampshire* was sunk by a mine, not by a torpedo. The mine was laid to the westward of the Orkneys on May 29, 1916, by the German submarine *U–75*. A track chart of her movements between May 25 and June 1 is given on German plan No. II in the case accompanying the Admiralty Bluebook on Jutland.

Lord Jellicoe explains that the intention had been for the *Hampshire* to take the route passing eastward of the Orkneys, but "he (Lord Kitchener) was most anxious not to lose a moment on the sea

trip." On the afternoon of June 5 a gale sprang up from the northeast, raising a heavy sea, which the destroyers escorting the *Hampshire* could not face. It was not decided until that time that the *Hampshire* should take the route to the westward of and under the lee of the islands.

BRITISH PACIFIC CABLE—INCLUSION OF SAMOA IN NEW SYSTEM.

Source: Reliable.

20 December, 1921.

It was recently reported that the British Pacific cable would be duplicated. It is now proposed to include Samoa in the new system.

The present section from Suva to Fanning Island runs near Samoa and a slight deviation with the extent of about 50 miles will be made and an automatic relay station will be established near Apia at a small increased cost.

This plan will link up another area of British territory to the cable system and will also prove of considerable advantage in handling traffic.

Over the section from Suva to Fanning Island, a distance of about 2,000 miles, the present rate of transmission is 22 words a minute. Over the shorter sections, as proposed from Suva to Samoa and Samoa to Fanning Island, it is estimated that the rate of transmission will be 35 words a minute.

This is one of many indications confirming previous reports that the British Government has a comprehensive plan under way for improving its communication system throughout the world, particularly the colonial possessions of the British Empire in the Far East.

BRITISH NAVAL ACTIVITY AT WEIHAIWEI.

Source: Reliable.

1 November, 1921.

There is great activity on the part of British naval authorities at Weihaiwei. It is stated that the old Chinese Naval Yamen has been remodeled and turned into a canteen capable of accommodating 5,000 men; that the present shops are to be enlarged, an additional area of some 8 acres being added; that 500 Indian troops are now located there, and that barracks to accommodate 20,000 men are shortly to be started.

There have been many rumors recently as to a portion of the Weihaiwei concession being returned to China. This would appear to be true, but it seems merely to have been a revision of boundaries,

other property being secured in lieu of that surrendered, with the result that possibilities of defense are vastly increased.

In a recent conversation with a naval officer, the latter said: "By next spring we will be in a position to do anything for the British fleet except docking." Nothing was said in regard to fortifications.

If this report is correct, it would seem to point toward the utilization of Weihaiwei as the new base now spoken of in cablegrams.

BRITISH PARACHUTE FLARES FIRED FROM GUNS.

Source: Reliable.

3 January, 1922.

1. Experiments are being conducted in England at coastal air stations with a gun which shoots a parachute into the air. This gun is known technically as an impulse tube, the apparatus having been designed and is being perfected at the National Physical Laboratory.

2. A shell containing the folded parachute is loaded into the gun or tube and from it is projected into the air with a charge of black powder fired by electricity. When the shell reaches a height of 2,000 feet the head is automatically blown off and the parachute expelled. Attached to the parachute is a brilliant magnesium flare which lights automatically when the parachute opens.

3. The parachute flares were developed by a subsidiary company through Messrs. Vickers, Limited, and have been taken over by the air ministry with a view to bringing them to air ministry and other governmental department requirements.

4. At the present time the flare is fired from a smooth-bore gun about 2½ inches in diameter. The exterior form of the projectile appears to be almost the normal form. In the body of the projectile is carried the pyrotechnic and a powder-trained fuse for an altitude of 2,000 feet. In the nose is carried the paper parachute about 2 feet in diameter. The explosive charge fired by the fuse blows the nose cap off the projectile, opens the parachute, and fires the pyrotechnic at the same time.

5. As constructed at present, the projectile is made of a very light aluminum casing, and would not stand high chamber pressures or high velocities. In fact, it is understood that a considerable percentage of the projectiles exploded just outside the muzzle. The projectile weighs about 4 pounds and is fired at low muzzle velocity, probably not over 700 feet per second.

6. These flares have been developed as colored lights and colored smokes and in both cases burn for about 30 seconds.

7. In the daytime bombs to emit dense black smoke take the place of the magnesium flares. Both the flares and the smoke signals are being used from aerodromes as signals to pilots to assist in locating the aerodrome.

POLICIES OF NATIONS IN THE FAR EAST.

Source: Reliable.

25 November, 1921.

JAPANESE POLICY ON THE ASIATIC MAINLAND.

A journey through the interior of China and through Siberia, Manchuria, and Mongolia will make even the most ardent Japanophile change in his admiration for Dai Nippon.

There is one fundamental fact accepted by all those following current events in the Far East and that is that Japan to exist as a nation must control and have the resources of the eastern part of the continent of Asia, and that she can best accomplish this according to her own moral code by keeping that part of Asia in a state of turmoil and unrest. In other words, Japan's policy is to keep the "pot boiling." A weak China, a disordered Siberia, and Mongolia ready to do anything—these are all assets to Japan. Its a waste of time and perversion of one's intellect to enumerate all the dishonest acts of the Japanese on the Asiatic mainland, and anyone who attempts to refute the statement that the Japanese have practiced dishonorable methods in Asia have never traveled on that continent. Those of us living in the Far East who see this sordid drama of aggression being played by the Japanese realize that if the aim of the Pacific Conference is to promote peace in the Far East it can only be accomplished in one way, and that is to call a halt to future Japanese aggressive actions and attempt to rectify some of her past ones.

To the average American living at home and never having visited the Orient it must be very difficult to form any correct idea whatever of oriental conditions, when in reading the morning paper one sees sentiments expressed by some of our prominent business men and Army officers, which would lead one to believe that the Japanese are the most maligned people on earth and that the only way to attain a stable condition in the Orient is by American-Japanese economic cooperation.

The Japanese are past masters at entertaining and flattery and more than one prominent American has been made a monkey of by them and made statements which later he has had to retract.

Without going into details, however, it is of interest to glance hurriedly at what the Japanese are doing at present on the Asiatic mainland. In the territory of the Far Eastern Republic they are making every effort to obtain a strong economic and military stronghold. Their main objective in this country is to get control of the northern end of the island of Saghalien and obtain the ownership of the rich fuel-oil fields and coking-coal deposits in that island. The intrigues of the Japanese in Siberia are so complicated and changing that one sometimes is led to believe that the Japanese themselves at times hardly know exactly what parties they are backing.

At first they promised Semenoff support, only to turn round and throw him down for Baron Ungern, whom they forsook when they saw he was getting into difficulties, and then boosted Merkuloff in his Priamur Vladivostok Provisional Government ambitions.

In Manchuria they still more or less cater to the desires of Chang Tso-lin, whom they believe still has a strong hold upon the Peking Government. China's reply to the Japanese note upon the Shantung question must have been a great surprise to the Japanese if they honestly believed they could control Peking through Chang Tso-lin.

A good example of Japanese business acumen was related to me by Chang Tso-lin in an interview in which we were discussing the military and economic advantages of the port of Hulutao, which the Japanese for the past three years have been making every effort to obtain the right to develop.

Chang Tso-lin stated that, in the event of his allowing the lowest bidder for the construction and development of Hulutao Harbor to build the same, the Japanese would obtain this contract, for, as he said, the latter could underbid any American or English engineering firm by at least 50 per cent, for during the construction of the works they would be in a position under Japanese military protection to smuggle in enough opium and morphia to fully offset any loss that might accrue due to their low bid.

After the downfall of the pro-Japanese Government in Peking during the summer of 1920, ten Chinese officials, well known as being in the pay of the Japanese Government, took refuge in the latter's legation; one of these Chinese criminals was the famous "Little Hsu" (Hsu Shucheng), who stood convicted of many crimes towards the Chinese Government. The Japanese authorities refused to turn over these Chinese criminals to the Chinese Government and later on allowed Little Hsu to escape, believing full well that this renegade Chinese would at once start plotting against the Government and in this belief they were not disappointed. Little Hsu escaped to the safety of the French Concession in Shanghai and from there started activities which eventually led to the Ichang lootings and Wuchang mutiny and only lately has been cleared up by the efforts of Gen. Wu Pei-fu.

In studying China's seacoast one is struck by the scarcity of harbors, and it is interesting to note that on the Asiatic mainland Japan controls the seacoast from the port of Narami in Korea to Formosa in the south, and if her policy of intimidation towards the Chita government is a success she would extend her sphere of influence as far north as the port of Nikoliaevsk at the mouth of the Amur River. Japan's economic strongholds in China and her numerous military radio stations (built in direct violation of China's sover-

eignty) are too numerous to enumerate, and can be conveniently found listed in Mr. Woodhead's estimable edition of the China Yearbook of 1921.

In studying the Japanese absorption of China one is struck by the large amount of territory in which Japan has consolidated her economic position. Both in Manchuria and in Shantung we see the Japanese owning and operating the only railroads and also owning practically all adjacent mines; the ports of Dalny and Tsingtao are just as Japanese as the ports of Kobe or Yokohama. The Upper Yangtze Valley, once known in the Orient as an English sphere of influence, is to-day a thing of the past, for the Japanese have obtained the full control of such valuable industrial enterprises as the Hanyang iron works, the Tayeh iron mines, and Pinghsiang coal mines.

Along the southeast coast of China Japan has fortified herself in her own Formosan territory and adjacent lying Pescadores Islands, and through her Twenty-one Demands (which she served on China while all the Allies except the United States were in no position to help China) she maintains the exclusive privilege of being the only nation that China can ask for assistance in the event of the latter's desire to erect any military or naval defenses in the Province of Fukien.

BRITISH POLICY IN THE FAR EAST.

In analyzing British policy in the Far East one must always bear in mind the position that India holds in the British Empire. The collapse of British rule in India would mean the termination of Great Britain's prestige in the Orient and probably eventually result in the loss of Australasia to the British Empire.

There is no doubt that Great Britain views with much apprehension the increasing power of Japan, but that she would gladly sacrifice to Japan all of her interest on the Asiatic mainland north of the Yangtsze River in exchange for a promise from the Japanese that the latter would never interfere with her actions and policy in India, Australasia, and the hinterland of Hongkong.

Fortunately for the world's peace and China's sovereignty such an Anglo-Japanese policy as outlined above would never be tolerated by the United States.

Statements made by some American college professors and financiers have led some people to believe that the English occupy the same relative position in the sight of the Chinese in South China as the Japanese do in North China.

To hold such an opinion is incorrect, for although the English attempted to consolidate their economic and military position in the Crown Colony of Hongkong by monopolistic contracts in Kwangtung

Province, they have never stooped to practice the underhand and dishonest methods followed by the Japanese in Northern China.

The so-called Cassel contract in Kwangtung Province—if it is ever approved by the Chinese Government—would certainly give the British complete control of this Province and, so far as the Chinese inhabitants of Kwangtung are concerned, it would certainly result to their advantage, and, so far as the United States is concerned, it would be also to our advantage in eliminating the possibility of this rich Province becoming a Japanese sphere of influence.

The great publicity which was given the Cassel contract in the United States has resulted in creating quite a marked anti-American feeling in certain British circles, much to the edification and joy of the Japanese who always promote any Anglo-American feud, for they fully realize that a complete understanding between England and America as regards oriental policies would result in Japan having to crawl down from her present exalted position.

It can be stated without hesitancy that the average British resident of China is generally pro-American; any Anglo-American friction that exists is generally to be found in the small Chinese outports and usually is caused by commercial rivalry and competition.

The first thing that strikes the newcomer to Peking is the only too-evident fact that American, English, and Japanese influence are predominant in Chinese national affairs and that the policy of the French and Italian Governments have little bearing upon general conditions in the Orient. The main interest of France is in French Indo-China, and France cares little about events and happenings in North China.

The recent failure of the Banque Industrielle in China has been a terrible blow to French prestige in the Orient and it will be many years before the Chinese will look with any favor upon Chinese-French relations.

PORTUGUESE POLICY IN THE FAR EAST.

The recent dispute between the Portuguese in Macao and Sun Yat-sen & Co. in Canton firmly convinces anyone who has ever visited Macao that the Portuguese Government must be made to close down the gambling saloons and opium factories in that place. There is no reason why the Portuguese Government should retain the privilege of operating a cesspool of immorality on what to all intents and purposes is Chinese soil.

GENERAL OUTLOOK IN CHINA.

The complete collapse of the Peking Government within a few months seems inevitable. Any attempt on the part of Chang Tso-lin to step into the breach and assume responsibility would be short-lived. The only man who might have a chance to come to Peking,

assume responsibility for foreign obligations and at the same time exact respect and support from the Provinces, is Wu Pei-fu. If Chen Chiung-ming, the ablest military leader in the South, can be brought to support Wu Pei-fu's suggestion for a people's assembly, which now seems at least possible, both the Peking and Canton Governments could be eliminated and a fresh start made towards democracy. Such a movement would probably mean the isolation and independence of Manchuria under Japanese patronage. It is impossible to prophesy that any of these events is coming about, but the indications are that China is either going to sink into complete disintegration and chaos, inviting foreign intervention, or that Wu Pei-fu and his allies are going to eliminate the old official classes from public affairs in both the North and the South and give the Republic a fresh start.

CONDITIONS THAT MUST BE REALIZED IN ORDER TO ELIMINATE THE POSSIBILITY OF THE FAR EAST BEING THE NEXT THEATER OF WAR.

The Chinese Republic, to-day comprising theoretically 22 Provinces and two territories, encircles an area of 4,250,000 miles, which means that it is 25 per cent larger than either Australia or the United States, one-third the size of the whole British Empire, and one-half the size of the old Russian Empire. This vast area can be said to be in a general state of disorder and chaos and this unfortunate condition of affairs have been and to some extent still is intentionally promoted by Japanese Government intrigue and money; this statement must be accepted as being true, correct, and based on actualities and not opinions.

The potential commercial possibilities of China are fully realized in foreign countries and every year sees more commercial rivalry in China and to have such competition exist in a country where law and order do not exist from an occidental point of view creates conditions which may lead to bad feeling and possibly conflict.

In other words Japanese actions and policy must change in its attitude towards the natives of the Asiatic mainland and until this is accomplished any nation having valuable interests to protect in the Orient must be prepared to do so by force of arms.

There can be no doubt that China has reached that stage to-day where some sort of foreign control of her Government is necessary, but this question will have to be approached with great care and tact for there is no doubt that there is a marked antiforeign feeling in China to-day and this sentiment is on the increase; and until the Chinese people of the better informed maritime Provinces can be made to realize that a certain amount of foreign control of China's Government is a necessity it would be useless and futile to attempt to install any foreign control of government.

The first essential to permanent peace in the Far East is a strong China. This is accepted as axiomatic by every student of Far Eastern politics who has made first hand investigation of this part of the world, and while it may not be apparent to the parties to the Washington Conference at the outset, it is inevitable that if the subject of peace in the Orient is given the benefit of protracted discussion, this conclusion will be arrived at sooner or later. Japan draws her strength chiefly from the weakness of China.

Japan's position of strength in the Far East is out of all proportion to her war resources, her native production of such essential war materials as coal and iron, her food production, her industrial development along modern lines, the efficiency of her army, the number and condition of her ships, and her accumulation of available wealth. Japan, considered apart from her hold upon China's resources, would be a third-lass power, and considered with relation to her internal development could not be recognized as a civilized state. Japan's strength, therefore, is dependent in very large measure upon China's weakness. There will be no promise of permanent peace in the Orient until Japan is made to feel that the occidental nations are not deceived by her pretensions to the power and prestige of a first-class nation, and until Japan is rated by a unanimous verdict among the great Powers, as the petty and semi-civilized Island Kingdom that she really is.

The problem of insuring the peace of the Pacific is therefore in large part the problem of putting Japan in her place. This again is almost wholly dependent upon the problem of protecting China from Japanese exploitation during China's period of political evolution into a strong and self-respecting nation. When Japan can no longer count upon being able in the event of war to put an army of occupation into China without Chinese resistance, to control and use without effective Chinese protest China's available supplies of minerals and food, and to seize and control China's railways, waterways, and other means of communication, then Japan will assume the position in the Pacific that Holland, for instance, or Denmark occupies in Europe, and the biggest of all Pacific problems will be solved.

While this broad aspect of the problem will be recognized by the American representatives at the Pacific Conference, it is not at all likely that it will be stated or discussed; but it seems inevitable that certain detailed problems having a bearing upon this general situation will come up for discussion.

While recognizing that a strongly united China is the first essential to peace in the Orient, and while attempting to formulate an attitude toward China which will help to strengthen and unite the country, the immediate problem will arise in Washington of how to

deal with a Chinese delegation, or perhaps with several Chinese delegations which represent nothing at all by the time they reach Washington. As has been already pointed out, Peking shows signs of imminent collapse. At the moment of writing the Government has not contrived to raise the funds to meet the expenses of the delegates who have already set out for America.

It is not definitely known whether Canton is going to send a delegation or not. If such a delegation does set out from China at this moment it is again possible that by the time it reaches Washington there will be no Canton Government, and therefore no sponsors for the representatives. While, under such circumstances, it may be impossible for the American Government to take these delegations seriously as the representatives of the Chinese nation, it must be strongly urged that in both China's interest and American interests in the Orient, these delegates should be dealt with sympathetically and should be heard as witnesses to conditions in the Far East, and with no less consideration because one or the other of their so-called governments happen to collapse behind them.

The members of these delegations, although subject in China to the control of political cliques, and much engrossed while on Chinese soil in Chinese petty politics, are, for the most part, returned students who are sincerely interested in the welfare of their homeland, and who, when abroad, can be counted upon to represent the highest aspirations of their people without political bias.

On the other hand, the American Government should insist, while dealing with any and all Chinese delegates that if it is expected to take an interest in China's welfare, it must have from the Chinese delegation or delegations a frank statement of actual conditions in China, and that its sympathy is not to be elicited by pretensions or bluff. The Chinese should be told that America fully appreciates that the peace of the Far East is dependent upon an international guarantee against the exploitation of China by Japan or any other power, and that China will not strengthen her appeal for such guarantees by making pretensions to power, financial solvency, perfection in administrative matters, unity or internal peace, which Japan, or any other delegate to the conference, having representatives in China, can easily refute.

The Chinese delegates should be made to see that their best diplomacy in Washington will not be to play one power against another, but to admit that they have not evolved a perfect government, to admit that it will take many years, even if effective guarantees against interference are provided by the Powers, to evolve a workable democracy, and to ask for time under an international guarantee to work out or fight out internal problems which no outside influence can materially help to solve, but whose solution such inter-

ference as that of Japan during the past ten years indefinitely postpones.

If the question of Japan's conduct on the mainland of Asia comes up for detailed discussion the Japanese will undoubtedly advance their favorite argument that Japan is overpopulated and must have room on the mainland for expansion, just as the English-speaking peoples crowded out of their native island, have gone abroad and created for themselves new nations, dominions, and colonies. In advancing this argument the Japanese, of course, never raise the question of their inherent fitness to expand, taking this as they do for granted. This, however, is something which the occidental powers should take into consideration before they are brought to granting Japan a charter to expansion in any direction, or upon any particular piece of territory.

The Island of Java has a Malay population of approximately 40,000,000, larger in proportion to the territory than the Japanese population on any one island in the Japanese archipelago. We should not be likely to take the Java Malays very seriously if they insisted that their population necessitated their expansion, and that they must be given portions of the Malay States or of India, as an outlet for their "teeming millions."

There is no land on the Asiatic mainland adjacent to China over which the Japanese could extend their influence, political and economic, and their colonists, without displacing some race already in possession. We should therefore be doing any of Japan's neighbors, upon which Japan has designs, an injustice if we endorsed Japan's schemes for expansion, without considering the relative fitness of the would-be colonists and the prospective subjects to survive and develop the territories in question, and we might, if brought to subscribe to any one of Japan's schemes for imperial expansion, be interrupting national evolution and creating artificially a state of affairs which we should have to undo at some future time with much greater expenditure of blood and treasure than war with Japan in the immediate present would cause us.

It has already been pointed out that the present British tendency is to give Japan in exchange for immunity from Japanese expansion in China proper, a free hand in Manchuria and Siberia. When considering this bargain, the British are not taking into account the relative merits of the Russians, Chinese, and Japanese peoples. In fact they are not looking into the future at all, but are trying only to purchase peace, particularly economic peace in the immediate present. That the Japanese people may or may not be racially fit to supersede the Chinese in Manchuria, or the Russians in Siberia, does not enter into their calculations. They are simply meeting the political and economic exigencies of the moment.

One of the major arguments against Japan's plea for room in Asia is her apparent unfitness to colonize or to govern closely related races in the possessions which she has already acquired. It would take too much space to show in detail that in Formosa, Korea, Manchuria, and the communities in Siberia in which Japan now has a predominating influence, her people do not settle and develop the country, for the simple reason that they can not compete with any of the native populations, and that their governors do not govern for the benefit of the people, but that in all instances both Japanese officials and people devote their energies to the exploitation of the dependent territories, with no concern whatever for the welfare of any but Japanese.

In conclusion I might add that after a very careful study of conditions in the Orient I can sum the situation in a few words—make Japan behave in the East and you will have commercial prosperity and peace, let things continue as at present and you will eventually have war.

CONDITIONS IN CHINA.

Source: Reliable.

19 November, 1921.

RELATIONS AND ACTIVITIES OF VARIOUS NATIONALITIES IN CHINA.

The Japanese boycott is practically dead now, but the Chinese are ready and undoubtedly will revive it, depending on the result of the Washington Conference. In spite of this, in parts of China, except where the Japs are protected by their political and military organizations, as in Shantung, or have large communities, as in Shanghai, they are having a hard time. In Soochow, for instance, a city of 750,000 people only two hours from Shanghai, there are a bare handful of Japs, say about 80 or 100, who absolutely do not count. Any direct connection financially or otherwise with the South China movement of the Japanese has been denied emphatically by several well-informed parties. Wu Pei-fu also is believed to be independent of any Japanese income.

GERMANS.

Recent rumors of numerous ex-Germans being in China and with the various Chinese Armies are strongly denied. There are no foreigners with the Chinese Armies in the field. In fact, for the present, the Germans are down and out in China. Shortly after the armistice numerous Germans appeared, took large orders, and made big promises, but failed absolutely to produce any goods. An inspection of the customhouse returns shows absolutely no trade with China, either going or coming. There are a good many Germans in

Shanghai, but they keep themselves out of sight, are very unobtrusive, and seem only to wish to be let alone. Neuman's restaurant is running under a Chinese name on Boone Road opposite the Hongkew Market. Numerous Germans can be seen there nightly. They have also a club and a church next door to the navy purchasing office. As a factor in the present situation in China the Germans are considered "nil."

FRENCH.

For some time the French have been spreading propaganda to influence the United States to let Japan alone in her encroachments on China and Siberia, an instance of which was noted in the China Press of 9 November, in which French statesmen were reported to have stated that war between the United States and Japan was inevitable should the United States insist on equal rights in China, or words to that effect. Furthermore, French prestige was very badly affected by the policy of allowing the use of the French flag on Chinese vessels on the upper Yangtse, where the French are commonly referred to by the Chinese as having sold their flag for 5,000 taels a month. They are furthermore believed to smuggle opium and arms and to do everything despicable, according to one informant.

ITALIANS.

The Italians are in about the same status as the French, as they are also believed to smuggle opium and arms and to be engaged in all sorts of unsavory projects.

AMERICANS.

As usual, the Chinese are waiting for some one, and preferably the Americans, to extricate them from their difficulties. American prestige has been lowered, however, through the dollar incident on the upper Yangtse, which is very unfavorably regarded by both Chinese and Americans.

BRITISH.

The South China Party (Sun Yat Sen and company), as well as Cantonese generally, are reported to be very bitter against the British. In fact, one informant went so far as to claim that the British were more cordially hated there than the Japs. An important reason for this is the arbitary action of the Hongkong government in placing Canton subject to the Hongkong customs. This causes great loss of time and money and great inconvenience and heartburning to the Cantonese business men.

CONDITIONS AT SHANGHAI.

There is nothing abnormal going on at Shanghai. Money is very tight and, of course, the business depression continues. This

past week has been Race Week, and with the 11th Armistice Day, there have been five holidays. The hotels and restaurants are doing a big business in spite of hard times, and it is interesting to note that 45,000 tickets at $10 each for the Champion Sweepstakes were sold. Foreign influence in the way of certain unreliable business methods has reacted to a considerable extent on Chinese business men of the new régime. Whereas the old-time Chinese had the greatest respect for any form of contract, even when not in writing, now it is becoming the custom to require money to be on the counter in all deals. An example in the change of Chinese business standards is given in the recent instance wherein large cargoes of merchandise were ordered by Chinese merchants when the exchange was very high, but on arrival, some six months later, when the Mex dollar had dropped, many Chinese firms refused to accept the goods. Upon attempt to take proceedings against some 200 of these firms, it was discovered that they had shut up shop and disappeared to the Chinesse city or other parts unknown. The favorite topic of conversation in the clubs is the Washington Conference, in which extreme interest is being taken both by Chinese and foreigners. Recently very many banks and stock-exchange shops have been registered in Shanghai. These are principally Chinese, but there have been some Italian, French, and one or two American. Exchanges have been formed for nearly all commodities, and gambling and transfer of stock on margins is the order of the day.

The murder of Premier Hara caused considerable interest in Shanghai, and was the cause of various wildcat rumors of revolution, etc. Apparently it has not been definitely determined as yet whether the assassin was a tool of the militarist party, an ordinary Socialistic fanatic, or a Korean revolutionist. The only significance would be in case the murder should prove to have been instigated by the military party. Some think this would spell the ruin of Japan, as the Chinese losing at Washington would immediately start another boycott. The Shanghai Chamber of Commerce received a cable from their correspondent in the United States purporting to have information that the United States would recognize the economic but not the political and military rights of Japan in Siberia, Manchuria, and Shantung. This is not considered reliable information, but if true would react unfavorably on American prestige in China. In connection with the various rumors of trouble with the Japs, an employee of the British American Tobacco Co., told me that his company had discontinued all passages of their American employees via Japanese steamers.

CHINESE RESOLUTION: (Adopted at Shanghai at a meeting of Chinese people.)

Source: Reliable.

"We, Chinese of Shanghai, assembled to-day to commemorate the opening of the Washington Conference, call the attention of our own people and of the foreign nations friendly to China to the condition of our country. Although the people of China are at peace, the country to-day is divided by civil war, is weakened by misgovernment, and is slowly being ruined by the corruption and the inefficiency of those who are in control of the Government, both national and provincial. We are burdened by an enormous army, the cost of maintaining which has brought our great and rich country to such a plight that we are unable to meet our foreign and domestic obligations. These groups among the people who are intelligent understand the seriousness of this situation. But the vast majority of the people are still in darkness and are unable to comprehend the necessity for popular participation in government. The articulate groups are still weak, although as each year passes they are able to make their wishes felt to a greater extent. It is possible that the great Powers seeing the weakness of China and not understanding the cause of China's weakness nor the steps which are being taken to establish here an efficient and responsible Government, will determine upon a course which may on the surface appear to be expedient, but which can only serve to harm them as well as us. In the evolution of the Chinese people from the conditions which exist to-day to those which we hope will ultimately exist here, time is essential. Our history is too old and our numbers are too great for us to change our mode of life in the twinkle of an eye, no matter how important it may be that such a change take place.

"If the Powers agree to assist China by not interfering with her during this process of change and by recognizing that during the transitional period, disturbances, disorders and chaos are natural concomitants, and if they bring to their relations with us a deep sympathy for what we are trying to do, the peace of Asia is assured. If, on the other hand, China is permitted to fall a prey to predatory foreign powers, because she can not stand on her feet at this moment, the Pacific Ocean will be red with the blood of all the nations of the world, just as to-day the Atlantic is the scene of strife and contention. We hope that the Disarmament Conference in Washington will be sufficiently foresighted to realize the importance of assisting China to remain independent and to develop into a strong nation. The welfare of the entire world depends upon this."

"FILTRATA" APPARATUS.

Firing Test of a Boiler Fed by Sea Water (France).

Source: Reliable.

23 November, 1921.

The ship selected was the water-boat *Alcarazas*, equipped with a cylindrical return flame boiler having two furnaces.

Description of the Apparatus.

The "filtrata" apparatus consists of a cast-iron cylinder with exterior ribs, in which is placed a second cylinder pierced with holes of small diameter.

The cast-iron cylinder is closed by a plate fitted with a drain-cock; the joint is secured by a yoke with four branches.

This cylinder has a valve for the feed of steam and an outlet valve for the emulsion.

The interior cylinder has a perforated plug and is traversed throughout its whole length by a tube similarly perforated, diameter 28 by 32. The dimensions of the "filtrator" apparatus vary with the kind of boiler and the quality of water employed.

The maximum contents of linseed grain of the apparatus installed in the *Alcarazas* is 4 kilogram.

Boiler of the "Alcarazas."

Volume of water at normal level	4,000 liters.
Working pressure of boiler	8 kilograms.

The boiler, before the test, was in perfect condition of cleanness in all parts visible through the different orifices and through the manhole.

First test.—The boiler was fired on 29 May, 1921, and the test commenced on the morning of the 30th, following exactly the given program.

During the period of the test the service of the water boat was very irregular, but in addition to its service of supplying water, this small vessel having to assure the fire-extinguishing service of the navy yard, the pressure of the boiler was never below 3 kilograms during stops of the engine, which pressure was sufficient to assure circulation in the liquid mass.

The observations noted by the board during the test were as follows:

(1) The concentration of the boiler water progressively rose from slightly over 1 to 3½ of the regulation salinometer.

(2) From the beginning of the test, through insufficient tightness of the valves and tubing, a strong odor of heated linseed oil spread throughout the engine room. This odor became gradually less noticeable and was entirely absent at the end of the test.

(3) The analysis of the linseed grains showed 35% of oil. This proportion was measurably found in the form of boiled linseed oil in the residuum. The active part consisted of 15% mucilage.

Results.—The test was concluded on June 14 at the close of the day; the apparatus isolated from the boiler on June 15 at 6.30 a. m.

On June 17 the boiler was emptied and opened in the presence of the board and Engineer Kobzeff.

All parts of the boiler were found to be in a perfect condition of cleanness and there was no trace of saline deposits or mud.

Some cakings of deposit of about 2 millimeters trickness were found in the neighborhood of the drain pipe. These cakings, covered with a blackish film, no doubt arise from the detaching of old deposits and which remained after previous cleanings in the inaccessible parts of the boiler.

The drying of the tubular nest revealed over its entire extent small bright points the nature of which it was not possible exactly to determine, but which presented all the appearance of the graphite contained in the composition of the Belleville paste which was used in closing the joints of the apparatus.

An examination of the cylinders of the engine revealed nothing noteworthy.

Conclusion of the first test.—The results obtained by this first test are convincing and show:

First. That the use of linseed grain with the "filtrator" apparatus not only prevents the formation of deposits in a boiler fed with sea water, but also attacks old deposits, which gradually become detached.

Second. That when the concentration of the salt water in the boiler exceeds 3½° of the regulation salinometer, the mucilage extracted from the linseed grains by the steam maintains in dissolution all the salts held in the sea water.

The salts in excess are removed by extractions.

Second Test.—The second test was commenced June 21, 1921.

At the request of Engineer Kobzeff the zinc plates were done away with.

For this test the crew followed exactly the program established for the first, but with orders to make the necessary number of extractions so as not to exceed 3° of the regulation salinometer as the concentration of the water in the boiler.

The duration of the test was 30 days.

During this period the service of the *Alcarazas* was more active than on the first occasion, and the quantity of water introduced into the boiler was about 29,500 liters.

Upon analysis. the dry extract contained in 1 liter of water being 40.56 grams. the weight of salts introduced was therefore approximately 1.200 kilograms.

The odor of boiled linseed oil persisted in the engine room through the difficulties of obtaining complete tightness of the valves and tubing of the boiler which has been in use for twelve years. The odor was. moreover. very faint and did not incommodate for an instant the personnel in charge of the apparatus.

An examination of the pistons showed that the steam was dryer than when the boiler was fed with fresh water.

Lubricating had to be slightly increased. which cost was largely compensated by a better working capacity of the engine.

Results.—The boiler was drained after cooling and again opened on July 23. 1921.

All parts of the boiler were found to be in perfect condition of cleanness.

The dry extract contained in 1 liter of salt water taken at the moment of emptying being 75.60 grams. the weight of salt remaining in the boiler was 302 kilograms. and consequently the total weight of salts removed by extractions was 898 kilograms.

FRENCH LONG-RANGE GUNS.

Source: Reliable.

2 December, 1921.

Certain proof firings of the 210-mm. long range gun were held at Le Creusot the 15 November. 1921. Five shots were fired: the weight of powder increased after each shot. The results were as follows:

Weight of powder: 145 kgs. (319.7 lbs.) BM 19.

Weight of projectile: 116 kgs. (255.7 lbs.).

Maximum pressure: 3,900 kgs. per sq. cm. (24.7 tons per sq. in.).

Muzzle velocity: 1,380 meters (4.527.55 f/s.) per second.

This 210-mm. gun was obtained by inserting a tube. using radial expansion. in a 340-mm. gun; length 110 calibers. The projectile was rifled. The powder was nitrocellulose. thickest possible grain. The mount is that known as railroad. firing from an Epi (curved track).

It is not believed that this gun is considered a success. A former director of the gun foundry stated. in conversation referring to the 110-caliber Creusot gun. that in seven (7) shots the bore was enlarged by wearing 1.3 mm. and attended by a loss of 100 mm. velocity.

It may be safely stated that at the present time the French have no long range gun for mounting in shore batteries. It does not

appear that they will soon have such guns. This, notwithstanding the reports from Germany to the contrary. There is good reason to believe that the earth works observed in the vicinitiy of Cape Gris Nez constitute the work that was done with a view to constructing a Dover Channel tunnel.

GERMAN ORDNANCE.

Source: Reliable.

November 17, 1921.

The German Admiralty's specifications for delayed action base fuses for armor piercing projectiles required shells to penetrate without breaking up the projectile and to explode 33 feet behind the plate. Under certain conditions of oblique firing the projectile exploded a little farther than 33 feet from the plate. The specifications permitted an allowance of plus or minus 6 feet in the specified distance of the explosion from the plate. In the test of fuses the test specimens were selected at random. Ninety-nine per cent were required to function at the proper distance behind the plate after penetration.

In testing the fuses for delayed action base fuse test alone, 700 meters striking velocity is used against 15 mm. plate, 45° oblique, and 90° (normal), and 150 mm. plate, 90° and 15° oblique.

It is understood that the naval observer, Berlin, has forwarded already to the Department a sketch made by himself of this fuse. There are two safety devices for protection against detonation during transportation and against the shock on the base of the projectile occurring when the gun is fired. One of these safety devices is operated by the rotation of the shell and is so arranged that the shell will have traveled a specified distance from the muzzle of the gun before the device is completely unlocked.

The other safety device is a brass cylinder fitted with a split ring spring arrangement which keeps the plunger separated from the fulminate of mercury cap. The fulminate of mercury cap has a small charge of black powder of special grade, and especially packed, placed in physical contact with it.

It is interesting to note that the delayed action of this fuse is obtained between the black powder and the booster. The flame from the black powder passes for a considerable proportion of this distance through a straight wide passage. It then enters a spiral passage which appears (from examination of a rough general arrangement drawing) to contract as the end of this spiral passage approaches the booster charge. This spiral passage apparently

makes one or one and one-fifth complete turn within the fuse. The diameter of the spiral passage is judged to be not more than one-fourth of that of the straight part of the passage from the black powder at the fulminate cap. Considering the entire distance from the fulminate cap to the booster, about three-fourths of this distance is a straight passage of comparatively large diameter, the remaining quarter being the spiral passage of small diameter. The flame from the black powder passes through the passage and detonates the fuse.

The amount of information which could be obtained on this feature of the fuse was, of course, exceedingly limited. Krupp's representatives repeatedly stated that even if we had the fuses we could not manufacture them without certain of their skilled mechanics and engineers. In view of these statements I pressed them for a certain number of fuses. They not only would not give the fuses but would not give me even a general arrangement drawing of the fuse.

I proposed that Krupps furnish 50 delayed-action base fuses for armor-piercing projectiles to the Department for test. It will be noted from the official proposal of Krupp, which will be given later in this report, that no mention is made of such an arrangement. However, from personal discussions on this matter, I am of the opinion that Krupps would agree to a counterproposal on the part of the Department for a number of these fuses to be placed at the disposal of the Department for test purposes, but only with the provision that the United States award them a contract for armor-piercing projectiles which will pay the cost of the manufacture of the fuses. They claim that it is impossible to manufacture the fuses in Germany owing to the supervision of the Reparations Commission; that in order to manufacture them outside of Germany the cost will be excessive, and that a contract for projectiles could be made by them to cover this cost. Such projectiles, of course, would be made according to any specifications we might desire. With reference to what Krupp would consider a substantial order for projectiles to cover the cost of manufacture of the fuses outside of Germany, it is believed that a contract for 600 or 700 projectiles would suffice, provided the majority of them are major-caliber projectiles. If the majority were minor-caliber projectiles the number would probably have to be increased to about 800.

By way of verification of the satisfactory action of the German delayed-action fuse for armor-piercing projectiles, the following remarks of Vice Admiral Rogge, former director of naval ordnance in the German Navy, are quoted:

> I consider the German delayed-action fuse for armor-piercing projectiles to be highly satisfactory in every respect. The delayed action was obtained by diverting the flame through the tortuous spiral passage. We experimented for

years with various kinds of fuse trains without success, and after adopting this method now used in obtaining the delayed action, it required much experimentation to get the design of the tortuous passage such that we could control satisfactorily the location of the explosion with reference to the plate.

In the battle of Jutland none of the British shell penetrated the armour without breaking up. This I consider largely responsible for the result of the battle.

The following proposal of Krupp for armor piercing projectiles fitted with delayed action fuses is quoted verbatim. Owing to the discontinuance of the courier service between the American embassies at Berlin and London, the original of this proposal, which is in the office of the naval attaché at London, is not signed:

We are prepared to grant permission to copy our designs of A. P. shells and base fuses for same, including the right to use U. S. patents Nos. 932173, 911792, 1063094 and 1072546, on the following terms:

The U. S. Government to declare their readiness to witness a firing test to be carried out in a neutral country by a foreign firm. The 2 or 3 armour plates required for the said test (one of them being required for the said firm's preliminary trials) to be supplied free of charge by the U. S. Government.

The largest gun with which the foreign firm could carry out the test is of the 35 cm calibre.

We presume that the test is to be carried out with oblique fire only, not with normal impact; in that event there would be required, for testing 35 cm A. P. shell:

K. C. plates of 170 mm thickness if attacked under an angle of 65° or K. C. plates of 260 mm thickness if attacked under an angle of 75°.

It may, however, become necessary to use plates of somewhat different thicknesses, according to the sizes of armour which are being turned out at the time. On receipt of the dimensions as finally decided upon, we should submit our final proposals as to requirements which the shells are to fulfill.

The bursters also to be supplied free of charge by the U. S. Government and to be manufactured to our drawings. The detonators to be provided by the foreign firm.

Shells fired with a M. V. of 600–610 m must pass through the plate without breaking up, that is to say, the points may be broken off, but the cavity must not be exposed. Loaded A. P. shell must burst at a distance of 8 metres or more behind the target.

The above tests were passed by shells manufactured at our works. However, as the shells must now be made elsewhere, so that other conditions, other raw materials, and other methods of treating must be reckoned with, due allowance for this must be made in judging the results obtained. We are nevertheless confident of fulfilling the above conditions; anyway, two at least of every three shells will, in our opinion, meet the above requirements.

Provided that the conditions to be finally agreed upon are fulfilled at the above-mentioned test, the U. S. Government to undertake:

1) To give the foreign firm an order for 1000 A. P. shells:

2) To purchase the right of copy our designs of A. P. shells and base fuses for same, the said right to include that of using the U. S. patents mentioned above for shells and fuses required for the U. S. Government.

Our price for the above right is $350,000 payable in full on conclusion of agreement.

This price to be increased to $400,000,—in case the order for 1000 shells, as stipulated sub 1). should not be given to the foreign firm.

It is considered that the proposals of Krupp are unsatisfactory in several respects.

It is recommended that the Navy Department make a counter proposal. The following suggestions are submitted for consideration in connection with any counter proposal that may be made:

(1) That the tests be carried out in the United States (at our own proving grounds).

(2) That the tests be conducted against plates both normal and with 30° obliquity.

(3) That the Department offer Krupp's a contract for 600 or 700 projectiles fitted with delayed action fuses for test purposes.

It is believed that the foregoing suggestions are as far as Krupp's will go in accepting a counter proposal.

The Germans claim that their ability to get their shell filler through armor was of great assistance to them in their development of a satisfactory delayed action fuse for A. P. projectiles. They stated that they believed the British were unable to get their shell filler through armor successfully. They were therefore unable to judge from the Battle of Jutland whether or not the British had a satisfactory delayed action fuse.

In the proposal of Krupp where they state "if attacked under an angle of 65°." they mean what we call an angle of 25° (that is 90—65=25).

If the tests of this fuse conducted by the Department are satisfactory and it should be desired to acquire the exclusive rights of manufacture, it is considered that they could be purchased for a much smaller figure than that quoted. The figures quoted by the Germans are probably about double what they expect to get, and it is probable that the amount they expected at the time the proposals were made can be further reduced because of some effect of a probable agreement of the Limitation of Armaments Conference for the general limitation of the size of navies. Krupp's firm desired to deal with the Department by selling all of their so-called war secrets with reference to material and the manufacture of steel for a lump sum. It was only after considerable discussion with them and persistent effort that I succeeded in separating the delayed action fuse from a large number of other matters in which the Department is not seriously interested as far as purchasing them is concerned.

S. M. S. "SEYDLITZ" IN THE BATTLE OF JUTLAND.

Source: Chief Engineer of "Seydlitz."

14 November, 1921.

With the command of "ship clear for action," the stokers of the voluntary watch took their posts for the damage control. The first officer, Capt. von Alverslebon, and the chief reserve engineer, Lucke, the chief of the stokers' voluntary watch, climbed into the conning tower, the armored hatches were closed, and they all sat down there in a fairly crowded condition, 12 men in a room of 25 cubic meters. The large schematic diagram of the ship hung ready—on this plan every room could be fitted with a red plug when the room filled with water. Whence comes the name "plug board."

The battle could begin — — — — Rrrums! went our first salvo to the great pleasure of everyone. But soon everybody had his hands full of work and computation and reflection so that one's head was whirling. Crack! it burst right in the neighborhood—that could be told by the hard bump or shock. At the same time water burst out of an upper corner. The fire extinguishing apparatus had to be torn out; for that reason the apparatus was put out of commission. A small brass tube containing the notes and sketches from the world above burst through the vacuum tube. The following report was read aloud:—"Shell struck division XIII starboard. The deck officers' mess is destroyed and is burning. The front electric switchboard is out of commission." The firemen's crew No. 2 received the order to put out the fire. For this it was necessary to put the fire extinguishing apparatus into working operation again. If in so doing, a considerable amount of water got into the hold of the leakage canalization, there was still enough coming up above in the extinguisher pipes, and that was the more important.

The firemen pressed on forward up on the middle deck. More gas masks were torn off than were put on, the hoses were unrolled and No. 1 was turned directly onto the center of the fire. "Extinguisher 2 water," ordered the chief, and a heavy stream of water poured into the burning ruins. Thick smoke and hot, scorching heat struck No. 1, the holder of the hose nozzle, but he directed the hose unswervingly on the devouring heat, always on the alert for the starting point of the flames. He wanted to save the piano, but it had already gone to pieces. The strings hung out of it like long hairs, and as he directed the stream of water on it the strings were merrily combed out by the water. Everyone laughed at this comical sight while the shells were cracking overhead and the devastating fire was all about. The fire was soon extinguished, and now the pump chief, the ever-merry and happy machinist, Roth, had to see that the water which had entered was scudded.

He was scarcely through with his preparations and had made his report to the first officer when the latter received this report, "Shell struck in the transhipment room of the Caesar turret. Turret is burning." Order—Flood.

That was a delightful gift. Just like the 24th of January, 1915. At that time all the projectiles of the turret were like gigantic sky-rockets, one igniting after the other and burning out with huge girandoles. At that time the second pump master, First Mate Heidkamp, flooded the ammunition chambers. The air was filled with poisonous nitrogen gases. The valves were glowing with the heat and the flesh on his hands was all burned as he took hold of them but he had carried out the orders of the first officers and had saved the ship from explosion.

Now there came a tremendous shock through all the ship—the entire hull seemed to raise itself up and in the first moment everyone thought "the *Seydlitz* has exploded." But the secure ship went quietly on. It is quite true that a torpedo had torn a huge hole: the armored torpedo bulkhead, however, withstood the gigantic pressure and was only badly bulged.

On the other, the port side, a shell had burst and had also torn a gigantic hole, through which the water poured in streams. Several shells had struck forward. The damage-control divisions pressed forward, but the walls, which were sporadically perforated like a sieve, could not be stopped up: some of the leaks were a square meter in size and the water poured in everywhere. The leakage crew can save nothing, they can only establish which rooms, cargo, and gangways had been penetrated by the water. Thirty or forty reports were received by the damage control. Plug after plug was set up. Engineer Ellrich reckoned feverishly: 2,000 tons of water in the ship and heavy inclination towards the bow. From this latter fact, the first officer knew for a certainty that the fore part of the ship was almost completely full of water. Only the front torpedo room with its emergency exit remained empty—all around everything was full of water. This room carried the ship like an air bubble. There was nothing more to be saved in the front rooms of the ship. The only thing left to do was to go back behind the large armored diagonal bulkhead, even behind the next division, in order to protect this from the entrance of water. Chief Engineer Lucke hastened up and took charge of the arrangements. One leak on the port side was very dangerous. Every possible effort had to be made in order to prevent any further entrance of water. The large mattresses were pulled out and stuffed into the opening. That was not so simple. The edges of the hole were not smooth and even. The iron plates were bent for a meter in length and most irregularly torn with sharp edges and jagged corners. The crew, standing in the water, had great

difficulty in working. They pushed the mattresses into the holes Boards were sawed, fitted together, and fastened on. Beams were cut lengthwise and propped against them, and wedges were inserted between. Each piece had to be first tested and tried out as to how it would best fit. The pieces which were prepared before the battle had already been used up long ago for the smaller shell holes, as one had not counted on so many and such large holes. After hours of work, a planking was at last ready at this place and prevented the further entrance of water. It is quite true, all these places leaked in all the corners and along the edges but this water was quickly pumped out.

In the meantime, the battle was over and night had fallen. In the darkness and on account of the failure of part of the electric lighting, the work of stopping up the leaks was especially difficult and tiring. Here again it was First Mate Schmidt who tirelessly kept the electric-lighting system in working order, even as he did during the battle.

Suddenly came the report, "The bow is burning." A queer thing, everything full of water and still the deck which lies above the water is burning. High flames threatened to reveal the situation of the ship. The damage-control crew went to the bow of the ship right into the midst of all the flaming turmoil and ruins, hunted out and extinguished all the different flames by intense and indefatigable work.

In spite of all the sacrificing work and labors of the leakage crew—the stokers were already accustomed to hard work and here performed work which was absolutely superhuman—the water gradually gained ground. Rooms which were cut off or were not accessible, gangways, cargo, storerooms, and pipe gangways, they all gradually filled with water and the ship settled more and more toward the bow. Now the water rose higher and higher near the front turret. We were up to our necks. It must have been too much for the personnel, who were surprised by the flood of water and felt the water gradually rise higher and higher. If the water entered the turret then the ammunition rooms would fill. And they could not be emptied. Can the torpedo room, the only remaining air bubble, still be kept intact? And the time really came when the ammunition chambers filled with water in spite of all efforts to the contrary, and the water streamed through the emergency exit into the torpedo room like a waterfall. It was absolutely necessary to save this room. Engineer Walter went down, swam in the room to the leakage room, whose situation he knew thoroughly through frequent practice, plunged down and turned the valve, plunged again and turned it further until he had finally opened it entirely. Now, the huge leakage pumps could pump out the water, and the torpedo room, our swimming bladder as it were, our savior, could be kept empty.

The water threatened to force itself through the front casemates and here again the leakage crew had to stop up the holes with hanging mattresses and boards and wedges and blocks.

The front wall of the fifth boiler room was under water pressure. Many times it seemed as if it were going to bend through. Water came through the numerous cables, speaking tubes, screws, and nuts. One small stream beside the other formed together a strong stream of water and threatened to fill the room entirely. But Machinist Wegner had no such intention. "Fix the leakage props here," he commanded, and the prepared props were quickly braced against the place which threatened to bulge through, and fastened behind. Wherever there was evidence of a breaking of the bulkhead Machinist Wegner saw the place with the eye of an expert, and built in front of it. And he worked indefatigably so that the pistons of the leakage pumps did not stop up. The boilers continued to operate even when it rained considerably in the boiler room.

In the "damage control" it leaked on the bulkheads and on all corners and edges. At times the water came up to the men's chests. But with the help of a quickly organized chain it was quickly emptied by means of pails and buckets, and the room kept intact. For many hours the buckets were busy; relief had to come as the men were ready to sink from sheer exhaustion. The relief corps were also done up and were incapable of further work and all the heroic work which had been performed up to this time was entirely in vain.

The bulkhead broke through and even this room, which had been defended so long and so bravely, finally had to be given up. The leakage crew finally went aft.

In spite of all efforts, the ship's hull gradually sank deeper; now there was also a threatening diagonal tilt toward port, and the water forced itself into the casemates. Here again a chain had to be formed with buckets in order to get the water out, and it seemed for a long, long time as though it would all be of no avail; but after many anxious hours, the ship's pendulum showed a slight improvement. And when in the evening the anxiously longed-for and eagerly awaited pumping steamer of the shipyards tied up along the side and laid the long hoses in the casements, the ship slowly righted itself. It was almost a wonder that the *Seydlitz* still floated—5,300 tons of water had entered her.

A second night began. The leakage stops had to be continually repaired and new breakages had to be stopped up. Rest could not be thought of. Lucke, with the stokers of the leakage crew, was all over everywhere, and Schmidt also. He was always the first, the right "*Seydlitz* man—leading everything."

Gradually the ship righted itself. The leakage crew had won. But the ship was not yet in safety and therefore a third night must be lived through unflinchingly. In clothes which were soaked through, freezing cold, stiff from the extreme effort, sleepy from the heavy labor and working as if in a dream, the leakage crew performed its duty.

When a few days later, in front of Wilhelmshaven, the most dangerous quantities of water were pumped out of the ship, the *Seydlitz* could enter the locks. Now it was finally safe in port and the machinists and the others could be proud of having kept a first-class ship in a swimming condition up to the harbor of safety.

GERMAN CAPPED PROJECTILE.

Source: Reliable.

22 November, 1921.

This projectile was fitted with a new type of cap which was developed shortly before the battle of Jutland. They had not been placed on a quantity basis prior to the battle of Jutland, however, and none had been delivered for use at the time of that battle.

It is a little over three calibers in length. Capped, it measures 5½ calibers.

The Germans have carried out extensive experimentation with various types of caps. (The projectile fired from the long-range gun at Paris appear to verify this statement.) The cap of the projectile shown in the photograph is understood to be a double cap arrangement. I was not permitted to see any drawings or photographs of this latest capped projectile. In one of a large series of photographs illustrating the loading arrangements in the turrets I observed a capped projectile. The cap does not appear to be very different in general shape from that on our latest projectiles. It appeared, however, to have been constructed in two sections.

The firm of Krupp makes very great claims concerning the superior quality of their projectiles. From other discussions with some of their technical experts, however, I formed the opinion that the results they obtained from their projectiles were not due so much to their superior quality, but rather to this latest improved type of cap. The results obtained with the new type of cap have been better than they obtained with the older type.

As a standard of performance for the latest type projectile with the improved cap, it was required, when fired with a striking velocity of 600 meters, to penetrate one-half caliber plate placed at 15° obliquity without breaking up.

After firing at 200 mm. plate at an angle of 25° obliquity, with a striking velocity of 600 meters, the point of the projectile was bent to one side, indicating the toughness and homogeneity of the metal of the projectile and a certain absence of brittleness. The Germans claim this is due to special heat treatment of the metal in the projectile.

Another point of interest is the use of three bands separated from each other about the width of one band. The Germans obtained more accurate results with three bands than they did with either one or two. It was due to the results of experimental firing with different numbers of bands that they decided to use three bands, rather than to any scientific research. Very often results which the Germans have accomplished are attributed to scientific knowledge or research when, as a matter of fact, frequently they are the result of exhaustive experimentation. The use of the three bands resulted in increased steadiness of the projectile in rotation in flight, and in increased accuracy. The third band (the one nearest the base) was used as a gas seal.

Another of these capped projectiles of the latest type was fired at a 300 mm. plate at 15° obliquity with a striking velocity of 600 meters. This is also said to have penetrated without breaking up. There were no modern 15-inch plates available for testing this. Three and two-tenths per cent of the weight of the projectile was devoted to explosive, there being 25 kilos of explosive.

GERMAN LONG-RANGE GUN (Bombardment of Paris).

Source: Capt. Walter Kinzel.

"Just picture to yourself the occupied territory! Wherever a blue marine uniform appears, everyone knows: Aha! here comes a heavy marine cannon! And in spite of every precaution, the espionage functions in the most surprising way. But the long and short of it is that the people over there know all about things, the devil himself only knows in what way. Therefore we had to accommodate ourselves to change our marine blue for a correct field infantry uniform, even with washable regimental indications! Yes, indeed, not only the officers, but even our entire coast artillery. One accustoms himself to everything."

This conversation took place in the ministry of war during the second year of the war. The officer in field uniform was a lieutenant recently detached as a cruiser artillery officer in order to go, as many others, as commanding officer of the marine gun detachment on the western front.

For the trench warfare demanded, among other things, a weapon which the Army did not possess: The heaviest flat fire cannons of great caliber, and the largest possible radius of action such as could not be attained by the howitzers and batteries of the Army. Here it was no longer a question of attacking the fortifications and bombarding their concrete and armored constructions with heavy fire such as our Forty-second had accomplished so beautifully before Liege and Namur. Here the question was: Attack a couple of dozen kilometers behind the trench lines, take the rear communications and chief reserve stations, plunge into the troop quarters and general staff headquarters, take large stations and depots under fire, sow unrest in, and render unlivable the large cities behind the enemy's front where the troops collected and press the safety zone for the enemy command as far as possible back of the firing line.

For this reason the Marine Corps had to be called on. The ammunition division of the Admiralty had reserve guns for the ships; it was in close relationship with the firm of Krupp, which was the sole manufacturer of large and heavy cannon and the only firm constructing suitable gun mounts. This was the proper quarter in which to bring about the creation of the heavy flat fire, to undertake the necessary constructions and test them and carry out the experiments with the instruments.

We in the ammunition and ordnance department knew very soon just what that signified.

At the outbreak of the war, the actual naval constructive work for naval battles and naval artillery was given up. The ship cannons shot well and quickly and we were far superior to the English in ordnance. After the Skagerrak battle, the head of the English Fleet had to admit with sorrowful envy this superiority, and the fact blooms unfadingly even to-day in the British technical papers. The gun carriages, priming parts, direction devices, powder, fuses—one would be perfectly care free over all these things—they would perform their duty, and had done so. Therefore at the beginning of the war, the chief of ordnance had released nearly his entire personnel (officers) with a happy heart, in order that they might be used at the front. They were happy to leave the stuffy offices for service as commanders of line ships, cruisers, and auxiliary cruisers, and a number of them sealed their enthusiastic offering with their lives. But here there arose an entirely new weapon for the ordnance department, a task that no one dreamed of when things broke loose. But had it not already long ago penetrated into the very flesh and blood of the Marine Corps—to substitute quality for what the enemy might hold in quantity. And was not this an attractive object for an artilleryman? What signified day and night work? We can still hear our old leaders say: "No time? My friends, the day has

24 hours, and if this time does not suffice, take some of the night." Designs and models of constructions appeared quickly: the most advantageous forms of mortars and platforms, the best use to make of the cannon on hand, new creations, adaptations, material, time, workmen, all were calculated and recalculated: back and forth went the communications with the constructors in Essen. At night with the express train to Essen, consultations and plans during the following day; the next night back to Berlin and from early in the morning until late in the night, hard at work. The chief of the division, Rear Admiral Rogge, set the example and we followed suit. And in Essen one competed with us. From the experts down to the overseers and workmen—with what enthusiasm everyone went to work. And the result was not lacking. A few months after the beginning of the war, the first long-range cannon of 28 cm. was in position before Verdun, and others followed soon after. Every new cannon showed an improvement in the platforms of the gun mounts, the charging device, and the ammunition. Soon the plan was ready to give the heavy cannon more mobility than was previously thought possible. It was not very long before the Navy along with Krupp had the first heavy ship's cannon loaded on a specially constructed car with 18 axles. The principal thing was to so construct the railroad platform that the cannon could be pushed by the locomotive over the prepared platform in a half hour's time with perfectly simple means and without the cumbersome crane which was visible from such a distance; could be set off the runners and swung around on the platform and directed exactly on to the target, either toward the sides or upward, as the case might be, and begin its deadly work. And that all with one railroad car which, in the case of the 28-cm. cannon, weighed 270,000 kilograms in all and was 34 m. long, that is, nine times as heavy and twice as long as the heaviest express-train car; so that the necessity alone of crossing all the bridges and passing all the curves of the railroad line presented a heavy problem for the constructors. If the cannon had to be placed in another position because it was needed there or because it was under too heavy fire, then it was moved under the cover of night and fog, lifted without cranes, the runners pushed underneath it, coupled up, and after a few hours could be fetched by the locomotive.

It was not easy to find the personnel and officers for this weapon. What naval officer had voluntarily placed himself at disposition to take command of a heavy cannon on land and thereby forfeited the prospects of the submarine? On the other hand, it was only the naval officers, the reserve officers of the marine artillery, and our marine corps who understood the cannon and the ammunition. So the lemon which had already been badly squeezed had to furnish a

few more drops. Later on the Army helped out, especially with young officers, older gunners, and men who had been trained at the front, in emergency. Not all could fill the post at the gun equally well, for the light and heavy field artillery did not willingly relinquish their tried and trained men. We once met an old man at one of the newly erected naval batteries on the front who, along with his colleagues, was busying himself in the most perplexed way with the large shells. The smooth brass cases in which the powder was loaded and which were ejected automatically after the shot he looked upon as packing cases and praised their solidity and was about to attempt to open one with a clumsy tool in order to extract the cartridge and load it without the "case." He was a gunner from 1870, and wore the Iron Cross with the oak leaves.

II.

Very soon after the beginning of the dreadful trench warfare the wish arose to obtain a greater radius of action for our heavy naval guns. There were certain points a good distance behind the front which were particularly desirable to place under bombardment. Our air attacks had usually very good results; but they were always known to the enemy long before our flyers had reached their goal. Quite an entirely different moral effect had to be gained if an important base lying at some distance or some harbor, etc., was to be shown that it ran the danger of unexpected bombardment at any time of the day or night, and this without previous warning of any kind.

Not much was to be gained in this direction with our former heavy naval guns with their maximum radius of action of some 35 kilometers. It was necessary to get more out of the guns and be able to reach Dünkirchen, which lay about 45 kilometers from the western heavy batteries in Flanders.

This was accomplished in a surprisingly quick period of time. On April 28, 1915, came the first bombardment of Dünkirchen with 38 cm. guns and from that time on the bombardment was continuous. It was soon learned that this very important harbor for the importation of men, ammunition, and food was entirely out of commission.

In the year 1917 the territory around Cambrai was the basis of bombarding attacks on the enemy chief headquarters and railroad centers at St. Omer and Doullens at a distance of 62 kilometers.

The experiments and tests which led to this success presented many surprising points and a very great deal of interest in connection with the relation between altitude and radius of action. It was a most attractive prospect and one not entirely void of hope to pursue this path a little further.

Gen. Ludendorff, who in his writings is so laconic and cold, was asked in the spring of 1916 whether the general staff would consent to the expenditure of money, material, and man power for the possible construction of a gun with a radius of action of 100 kilometers (at that time our front trenches were 90 kilometers from Paris), and he responded with unquestionable warmth and was very delighted at the carrying out of this work. We had here brewed something very interesting. Now it was time to dish it up. In the meantime the demands on the ordnance division by the Navy had increased immeasurably. The experiences of the first naval battles had to be utilized; new battleships had to be built, new and continuous demands for submersible guns for the submarines in their bitter struggle against the "armed merchant ships," and many other demands incidental to the naval warfare arose, and all these things along with the various demands in the land warfare which have been already described—none of these important matters could be forgotten. This sometimes robbed us of breath and consciousness and often made us detest the work in the stuffy offices in Berlin. And now this new goal added to the others. Was it not an impertinence to want to attain this unknown radius of action? But there was no hesitation for a moment; we had basis enough on which we could reckon and know that it must succeed. We found the most thorough and expert support in the technical artillery division of the Krupp works for the carrying out of this idea: this was the place which already at the beginning of the war had astounded the world with its 42 mortar, which pounded down the concrete forts of Liege like mere mounds of earth. The preparatory work and calculations were started at full steam.

First came the problem of the interior ballistics. Who could entirely solve it? Whoever could see into the details of the process and see how in the hundredth of a second the pressure resulting from the development of gas increased from normal to about 3,500 kilograms per cubic centimeter and, while the wadding in the gun began to move and turn and push itself forward, gradually decreased until it sank suddenly under normal because the shell in front had been ejected with gigantic velocity. Before a huge new construction could be commenced a mental picture had to be made as to how the charge chamber was to be constructed, how large the charge and weight of the shell should be, and what kind of powder was to be used. Could the old, well-known, complicated and only approximate methods of calculation be used for such unusual conditions where an almost double initial velocity had to be attained? Calculations had to be made, the material examined from all points of view, investigated again, arrive at the results by all sorts of ways, and then compare these critically with each other. All previous experiences were brought up and carefully examined. Just how far could they be uti-

lized? A whole series of new and daring attempts were started. Many of them were encouraging, but for many months the doubts could not be entirely stilled. Must one be prepared for new and bitter disillusionments and surprises?

The Ordnance Division of the Navy Department went to work with Krupp quite quietly and secretly. No one could have the slightest suspicion of what was going on. For one should not speak of things whose development and outcome is uncertain. And then, if something came of it, it should be a perfect surprise. We knew quite well from bitter experience how difficult it was to guard a secret in Germany just as soon as a large circle was initiated into the mysteries of it. This particular secret had great dimensions. But we managed to a very large extent, to preserve it.

After work lasting three-quarters of year, Ludendorff surprised us with the short telegram: "Please extend radius of long range gun from 100 kilometers to 120."

That was easy to read and was quite explainable. The retreat to the Siegfried position had been decided on in the meantime—our lines were drawn back from 90 to 110 kilometers distant from Paris. We only gradually learned what this radius increase of 20 kilometers meant in increased labor, new calculations, disapointments, changes, and what difficulties this enlargement brought with it. Yes—to fire 100 kilometers—that seemed a small thing—but to fire 120. It was the same as telling the shipbuilder who had built a ship to run 30 nautical miles per hour that he must now run 36; or as thought one said to a jumper: "You can now jump 1.70 meters—go ahead now and jump 2." For a long time, we only knew one thing: It must be done. And then gradually came new ideas, improvements here and there where one thought the limit of possibility had already been reached, and a daring passing of this limit by the employment of new technical devices.

III.

"Yes, indeed, two seaplanes are to be at th new entrance of the Weser to-day at 1 o'clock p. m. sharply * * * What? Yes, at the orders of the Imperial Navy Department * * * They will be needed about two hours? Good! Then at 1 o'clock punctually."

We had finally gone so far that the first firing test with the new long range gun could be made. The difficulties with the interior ballistices seemed to have been overcome. One had arrived at quite unthinkable relationships. The powder charge which amounted formerly to about a third of the entire weight, now weighed twice as much as the shell, the length of the loading chamber was abso-

lutely gigantic. The barrel reached an elevation of 45° over the highest roofs and trees. It required no little courage to fire the thing. But no one distrusted Krupp's material. All calculations worked out exactly. In the morning, we had fired a couple of shots at a minimum elevation in order to gauge the speed of the projectile; they were satisfactory; in the afternoon, the distance of 110 kilometers was to be attempted. "Order flyers to proceed to the target and observe results!" That was my order. Now the observation post was prepared. That was no small proposition; from 40 to 120 kilometers, that is from the periphery of eastern Berlin to Frankfort on the Oder, this shot had to be watched with absolute certainty no matter where it fell, gauged and judged and telephoned immediately to the shooting point. With the help of our coast artillery divisions, these unfortunate individuals who had to defend the "rats in their holes" and saw no enemy masts during the entire war with the exception of the prizes which our submarines towed into the mouths of the rivers—with the help of these, we occupied the entire course and fitted them with gauging and measuring instruments and with telephones for direct communication with the gun itself.

We flew the 110 kilometers in 1½ hours. With our packs in the airplane, the surest, most comfortable, and quickest mode of transportation. At about 3 o'clock I reported myself by telephone to the firing spot. A quarter of an hour later came the message: "Watch out. Fired." "Eyes open, everybody! Absolute quiet in all telephone divisions. 3 minutes flight time—look out—struck! Report, whoever has seen the shot." After a short interim, the wavering report, "Here was a crash!" "Where, here?" "Here by the observation post 18a." "18a, Lieut. N. come to the telephone." "Here is Lieut. N." "What happened up there?" "The shell has struck apparently about 1 kilometer from here and about 300 meters in a cow shed. I have dispatched people to the spot and will report further details immediately."

Also, near 18a, about 95 kilometers from the gun; that was a fine distance, but nevertheless a failure. The shell could not have acted correctly: but what was the reason?

Soon after the confirming report. Fortunately no cows had been hurt. "Every part of the shell that can be found must be dug up, collected together, well packed, and brought immediately to the train and sent to Astadt. Firing is over."

The fragments of the projectile had to furnish information as to the failure of the shot. And they did so. They told many interesting secrets. (They had been almost 40 kilometers high—higher than any object yet made by man.) New consultations, calculations, decisions. And, after a few weeks, new trials.

IV.

At the middle of March, 1918, the batteries at Laon were clear; three gun positions well hidden in the forest, over whose highest point the barrel of the cannon extended, set at an elevation of 45°. Block houses for the accommodation of the officers and marines. All Marine Corps! Caves for the storage of the precious ammunition 5 meters under the ground. Firing position above and below the ground, the latter of which no one thought of using for the enemy's front was still at a distance of 12 kilometers. Camouflage apparatus and implements for hiding the gun from enemy airplanes and captive balloons during firing in clear weather. Solid telephone communications from all quarters with the headquarters. Everything ready up to the very last screw—the gun itself, the powder, and the projectiles.

The shells looked diminutive next to the mass of powder which was necessary to fire them. Otherwise one is accustomed in heavy guns to see the cartridges as long and as thick as the shells. Here the powder charge was from three to four times so long as the shell; it was as long as three full-grown men placed one above the other.

Would these little shells make a real impression in Paris? One tried to picture what would happen in Berlin if one of these things detonated suddenly on the Potsdamer Platz, and then on Alexander Platz, and then about 10 minutes later at the Zoo, and, then, finally on the Schlesischen Station. It was quite clear that we could not lay Paris in ruins with this long-range gun; we were dealing simply with a "moral cannon."

But success first. The center of Paris was about 128 kilometers distant. The gun was located somewhere in the forest. It was given an elevation of 50° in order to give as little air resistance as possible, and the charge was reckoned on a distance of 128 kilometers. Everything went as at the trial. There only arose a slight difficulty: Just imagine the gun as standing some place in a forest—the Grunewald near Berlin and was to fire on the city of Leipzig—that was approximately our distance—in what exact direction should the gun be directed? One must remember that a false aim of only 1° would miss the desired goal by more than 2,000 meters. The platform of the gun had to be provided with exact indications the zero point of which would indicate a stipulated point in Paris, and also so arranged that the effect on the gun of the lateral winds could be taken into consideration and accurately gauged. For this reason, astronomical measurements had to be used. And the difficulty was solved in the following manner: An expert professor of geography with his few assistants measured off all three platforms trigonometrically in two days' time and upon our arrival he met us with the announce-

ment: "The platforms are measured—you only need to set the gauge at zero and you strike in the middle of Paris!"

The Army in whose territory we had set the gun, did not view the matter very pleasurably. They were unfamiliar not only with the gun but with the men, and had received orders to fulfill our wishes and be of assistance to us. It was to be assumed that the successful bombardment of Paris would have a lively effect on the people. The Army didn't appreciate being robbed of their prerogative. And more than that. If we fired our big gun without particular care, then within a few days, the French even though their flyers and captive balloons had not already discovered it, would find it through the sonometer process which we as well as the enemy had greatly perfected; we wished to prevent this as long as possible and this one thing demanded especial measures on the part of the Army.

We had taken the following precautionary measures: Individual guns of similar caliber were placed at distances of several kilometers from our battery and these guns were connected with our headquarters by telephone. They fired at some given spot at the distance of from 22 to 25 kilometers and were to fire simultaneously with us, receiving such order by telephone. This was supposed to make the location of the big gun very difficult to locate to the enemy's sonometer divisions. This procedure was carrried out; it required continuous communication with the Army's artillery command so that in spite of all interruptions, all guns would be ready to fire at the same time. And this naturally signified a great encroachment on the independence of the artillery command.

The admiral came along to the front to be present at the opening fire on Paris. "I have orders to assist the admiral with all desired means. This principally means an observation of the goal. I believe that an observation of the effect of the first shots will be sufficient. Our best flyers have enthusiastically voluntered for observation of the first bombardment. The main question is just how exactly one can estimate the place which should be watched. Paris is pretty large!" This was said by the chief of staff of the Seventh Army on March 20, 1918. "How high can the flyers remain over Paris during the day? They must be at least 5,000 meters high. At this height they could never see where the shell struck in the sea of houses." Someone suggested to fire the first shot at some auxiliary target at a distance of 100 kilometers in any district whatsoever so that the flyers could watch the result in all quietness, and with accuracy. But when the shot was seen, could the observer tell exactly at what distance it fell? We had made our decision: "Many thanks for the kind offer to undertake the observation. But we will fire on Paris without incidental observation. I am firmly convinced that

we will strike it. The announcement of the target will be made by the French themselves, and in a very short period of time. We don't need to worry about that."

What sort of days were those on the western front just before March 21, 1918? Everyone felt that a great event was imminent; off we went. Hindenburg attacked, and even the oldest General Staff officer did not know exactly where and when things were to begin. Everything was in readiness. With a confident feeling of victory, the lion made ready for the spring. "You do not know where things are to begin? Now tell me one thing, where is Ludendorff?" "That is unknown!" "Unknown?" "No one knows! If you must speak with him, then get telephone connections with the chief headquarters; in that way you can get into connection with him immediately. But no one knows where he is. Even in chief headquarters only a few know and they don't tell anyone."

At 10 o'clock on the evening of the 20th of March, the general of the artillery in Marle brought the report: "To-morrow morning at 4 o'clock begins the bombardment." The thick fog in the early, ice-cold, morning hours of those first spring days, the gleaming sunlight at midday, the bombardment which grew more distant hour by hour, report of the advances of the troops, the spoils of war, the number of prisoners, the gain in territory—everyone felt that a great gain was being made. No one who was at the front at that time will ever forget it.

On the 22d we received the order to fire on Paris.

The first shot fell at a quarter past 7 o'clock early on the morning of the 23d. And then every quarter of an hour, and then in rapid succession until the sun broke through at 2 o'clock and we stopped in order not to disclose the situation of the batteries, for on the horizon all along the line were French captive balloons, peering about in the neighborhood.

"Everything ready for further firing to-morrow morning early at 7 o'clock."

"We will do the same thing for three days in succession and then we will see if we can learn what sort of success we have had."

V.

On that starry cold night of the 23d of March, we sat in our little block houses in the forest right near the outposts. From the distance could be heard the thunder of the artillery on the front. About us was the stillness of the dead. From time to time came the clap of the antiaircraft guns standing in the woods near by. In listening intently one could hear continuously the buzz of the French airplanes after the first shots of the antiaircraft guns, and

these planes seemed to be directly overhead. They came in order to throw bombs on the chief stations in the neighborhood of Laon, Fourdrain, Crepy, Couvron, etc., and from time to time could be heard the sharp detonation of the bombs which they had thrown.

"Do you believe that we have succeeded in striking Paris?" "Absolutely." "But if we do not hear anything about it?" "We will hear. There are ways and means to do so. After the third day we will wait until we have information." "Not a very pleasant prospect. It is not very delightful to sit here and fire on a fortification that one will probably never see." "No, it isn't very pleasant; I would prefer a second battle of Skaggerak. But to think of the envy of the French and English is particularly pleasant to me. This gun will show the world how much more we can accomplish than they can. And that they can not lie away like they have everything else."

The next morning the firing was continued in the same manner as it was begun. Two shots were fired on Paris to fall about 1½ kilometers to the side of each other. All the factors known to artillery were called on to guarantee sufficient dispersion which prevent a cannon becoming an instrument of precision. I unfortunately can not go into all the details regarding the manipulation of the giant gun during firing, and into the ballistics. As interesting as these things may be to persons with a knowledge of artillery, so important as may be the solution of all the difficulties incidental to an accomplishment of this kind, just so little advisable is it to give these very points out to the public.

The enthusiasm and desire to manipulate this gigantic instrument began to decrease among the officers and the men on account of the uncertainty as to whether we had really succeeded in hitting Paris effectively. It was felt that this question must be answered. Then at one o'clock in the afternoon, there came a telephone from the Chief Headquarters. The Admiral went himself to the telephone and listened * * * Silence everywhere * * * everyone watched the face of the Admiral * * * it didn't seem to be exactly bad * * * "I repeat: The Paris morning papers announce the bombardment of Paris through heavy artillery from a still unknown direction. Many thanks. Yes, Yes, I will continue the firing." There the mystery was solved. Even if the information as to the exact spot which had been struck, was a bit insufficient. And this information came from the French themselves as presupposed. The sending of this information to the troops was a signal for general jubilation. Everything was going beautifully. But the same care and precaution must be exercised. Everyone pictured the excitement in the bombarded city and tried to conceive ways in which the moral effect could be increased.

And in our quarters the satisfaction at feeling that the difficult work had at last been crowned with success was very great. At the midday meal which we took in two divisions (half of the men remained at the gun) toasts were drunk. The wine was a good one, and even if we did have to drink it in water glasses a toast was drunk to the artillery "world record," and to further success.

The glasses were just filled for the second time when —— B-r-r came the crash of a shell 250 meters from our position right in the very middle of the battery on the meadow. And after a minute or two came a second, a few hundred meters from the first. There was no doubt about it, our position was known and the enemy were bombarding us with heavy artillery. It was known that this would come, but that it should come so soon ——? It was at first a great puzzle to us how the French had succeeded within 30 hours after the first firing in learning the exact position of the gun in spite of the camouflaging through the accompanying bombardment and in bringing their heavy artillery into a proper position—about 25 kilometers distant—and opening fire on us with not altogether unsatisfactory results.

In the meantime our two guns (the third was not yet ready and would not be for several days) shot away. We had quickly arranged a very satisfactory warning system: About 4 kilometers from us was one of our antiaircraft batteries in the direction of the enemy guns which were firing on us. They heard the shots pass over them and telephoned the good old navy password "Warsaw" to the firing post which passed it on immediately to the gunners. There was still about three-quarters of a second before the blow struck; quite sufficient for the men at the gun to throw themselves back of it. Therefore, in the first days, the enemy's countermeasures disturbed us very little. Their ammunition was especially scarce in the beginning. The shells penetrated deep into the earth and threw up huge mountains of earth at the time of their detonation. If anyone was standing even about 20 meters from such a spot he was overpowered by the air pressure and buried under the earth, but for the most part remained unhurt and capable of further work. No one of our guns was hit. The losses were very slight, although in the first 14 days more than 5,000 shells were fired against our positions.

The chief of the battery spoke as follows in connection with the problem:

Admiral, we have been building on this spot for three-quarters of a year. French people live all about and their freedom of movement has been in no wise restricted, on account of the extraordinarily humane treatment they have received. It is, therefore, out of the question to keep secret the construction of such a huge arrangement as the gun entails. I am convinced that the exact position of the batteries has been sent to the French headquarters long ago via Belgium, the route of so many other reports. The only thing was they

didn't know exactly what the thing was going to be. Therefore the French had guns ready the moment anything unusual should arise. Therefore the idea that the guns which were firing on Paris was situated here wasn't especially difficult.

He was quite right. We found the fact confirmed in the French papers which we captured after taking the district Vailly-La Fere-Noyon, and the French railroad guns near Vailly which had really given us a good warming up. An interesting little episode occurred in connection therewith: Among the captured artillery plans we found one in which was indicated *exactly* the position of our Paris gun as it stood in the woods. The lines of intersection were made by a lieutenant in the French photometry troop who stated in the accompanying notation that he had established the position by cutting the fog coming from the fog generators.

Now these same generators were about 1,000 meters distant from the gun while the cuts from the position of the French engineering corps joined exactly (on 10 meters exactly) on the indicated position of the gun. He had therefore known the exact position of the gun beforehand and had then subsequently drawn the lines. Let us not refuse him his success.

As already stated, the bombardment of Paris had not suffered under the enemy's counterattacks. This bombardment was continued on the principle of not allowing Paris any rest. On the other hand, we had to be most economical with our gun. In firing at the maximum distance of 128 kilometers it had only a very short life; before 100 shots were fired the combustion room had become so large that firing had to be stopped. We had therefore to make a quick substitution of a new cylinder while the old one was sent back to the factory in order to be made usable again. Every kilometer that we progressed in our journey to Paris diminished the powder charge and therefore lengthened the life of the tube (cylinder).

And therefore it came about that our people kept at the work unterrified and continued to fire shot after shot on Paris; on one day alone we received 700 shots of heavy artillery—for 700 times sounded the "Warsaw" warning, the men hurried under cover and then came the report from one of the guns, "about 1,000 meters short and 300 meters to the left" or "75 meters from the position, without effect." When the territory gained in the March offensive was assured, there was an urgent necessity to hasten along with our battery. In the neighborhood of Ham we advanced almost 20 kilometers nearer Paris; that was of tremendous advantage to the life of the tube and had to be taken advantage of. There had to be new quarters set up at Ham and a change of position made as soon as possible. The moving brought with it naturally a short pause. And at that time the French rejoiced that they had put our gun out of

commission and at home everyone asked why Paris was being no longer bombarded.

It is not uninteresting to glance for a moment at the chance hits which the enemy gained, and the losses resulting therefrom.

On the first day of the enemy bombardment one of the heavy shells hit a large tree in the neighborhood of the gun. That wasn't very pleasant for the pieces of the shell remained all about and showered the position with a rain of iron. There were six or more badly wounded men at the gun, among them the cleverest commander, Lieut. (Reserve) Schönemann. None of our material was hurt. That was on the first day. For eight days we were bombarded without any result. Nine days later on the 1st of April one heavy shell fell directly in front of the entrance to the ammunition supply of another of our guns. We didn't shoot right away but carried the shells away. A number of people, mainly ordnance men, stood around the spot where the shell struck. We had 6 dead and 7 wounded. A few days later we lost a clever noncommissioned officer who was in charge of the telephone work.

That was the extent of the losses. Therefore the firing with over 500 heavy shells had resulted in 7 dead and 13 wounded with no loss of material.

On the contrary, the shells which missed us and fell in the neighborhood, killed a number of men who were quartered near by and had nothing whatsoever to do with the giant gun.

Similar remarkable incidents occurred in the immediate neighborhood. Near Soissons there was a 17-cm. naval gun placed well out in a fortified position, which was accessible to the enemy field guns, and daily fired 100 shots against Soissons at a distance of 21 kilometers. It was bombarded by enemy artillery, but in a struggle lasting over weeks, there was only a very slight loss. In April, 1918, as a reply to the French bombardment of Laon, a 24-cm. naval gun was placed tolerably far back of Laon, in a position which was apparently fairly safe and in a district which was very rarely bombarded by the enemy. It had scarcely fired one shot when it was struck full in the tube, which was entirely broken to pieces, and nearly the entire gun crew were placed out of commission. Accidental hit.

VI.

In May, 1918, while the army of our Crown Prince made the brilliant advance over the Chemin des Dames and advanced much further than was planned, the long-range naval guns continued to fire on Paris from the neighborhood of Ham, about 110 kilometers from Paris. They were subjected to a heavy aircraft bombardment, especially during the night, but had no noteworthy losses.

There was now a new opportunity to hit the enemy capital a little closer and in that way get more benefit from the gun. The new position was sought out without delay and the whole apparatus was moved over Soissons—in the deadly corner Soissons-Chateau Thierry-Reims—along the sides of which there was a row of troops, which had only one railroad for the entire conveyance of troops, supplies, ammunition, and provisions.

In the meantime, the gun platform and mortar were ready. The platform was no longer made of a concrete base, but an iron structure connected the gun with the mother earth and caught the gigantic recoil, a structure which was so arranged that it could be taken apart within a few days and arranged for the railroad gun. There was a specially trained corps for this purpose and one would have had to have seen our Marine Corps at work to have thoroughly appreciated their cleverness and ability.

This was the climax of the fighting at the front. The struggle against the overpowering superiority in quantity of material, soldiers, and flyers. It was a hot July.

I arrived in Laon late at night. It was no longer being bombarded. The enemy guns could not reach so far. But the station was still the goal of enemy airmen, and so when I arrived I was greeted in absolute darkness. I decided to remain the night in Laon. It was absolutely impossible to find the automobile which had been sent for me, on account of the pitch darkness. Slowly I pushed myself along with a gigantic number of soldiers, up to the commanding officer. He referred me to the division commander, not far from the Cathedral. It was a 20-minute climb with all my pack; if anything was left behind, it could never be found again. There were lots of people on the street and very gladly gave directions in so far as the light of flickering lanterns made it possible for them to do so. Finally the owners of an aristocratic old patrician house in Laon, who had grown indifferent to everything, finally took me in. By the faint light of a candle, I was led over steps and through courtyards and corridors into a large, dark room in which I rested the remaining hours until morning, on some kind of an old bed.

The next morning I found my automobile and proceeded southward over the Chemin des Dames—an unforgettable journey. For nearly four years, this district had been the scene of heavy fighting. It looked exactly as though an indescribably wild tornado had played itself out in a terrific earthquake; no stone remaining on the other, no tree uninjured, everything a mass of grey ruins as far as the eye could see. Only here and there a couple of fresh flowers—and then a whole mass of glowing dark red poppies.

Over Vailly and Braisne toward Jouaigne through the beautiful valley of the Aisne, standing in midsummer bloom with no hint of

war, and farther on over Fismes to Fere en Tardenois. Watch out! something is going on here! The streets deserted, wagons going at full speed, slouching figures and ——B-r-rr—correct! Fere en Tardenios was under enemy bombardment.

About 20 minutes later, at midday, I was at the farm which was occupied by the special naval command; a dirty, stony court-yard, large, empty rooms with vermin and flies the like of which I have never seen. My colleagues were there and we went immediately over to the woods. There was our "giant asparagus" well camouflaged against enemy airmen. Everything was ready for action. I had the firing orders in my pocket. A short examination of the fortified position, erected by making use of all the experiments we had gained and then began the firing. It went like clockwork, every handle had been practiced a hundred times—there were no interruptions. We ceased firing at twilight. In the evening we bathed in the Ourcq.

There was no question of having any rest. The antiaircraft guns pounded the entire night—up above us could be heard the whirl of the enemy motors, right and left, the bombs burst. On the next morning, everything was the same. The enemy airmen came in companies of 20 to 24. A few German flyers met them—they attacked and the bursting of the bombs and the pounding of the machine guns never ceased. As soon as we had any degree of free air above us, we lifted our old tube in the air and let go a shell on Paris.

In the afternoon I was near a 28-cm. naval gun standing not far distant. I was bidden to come over and look at the tube. There was nothing to be seen, but the gun had already fired over 750 shots and the question was just how much longer it could continue to fire. I looked at the battery. All round about, marine soldiers, many of them already two or three years at the front. They were proud of their cannons and loved them. Yes, the battery gunners should not worry but continue to fire until they remarked a shell falling short; 750 shots of Krupp had guaranteed 200. One could accomplish something with an instrument like this—it was sure that the navy had not sent its worst material to the front.

Two days later we realized we must relinquish this position. We had to take the cannon on the railroad as far as Soissons, for that was the only reversing station which would lead out of the deadly triangle already mentioned. It looked very disagreeable around near Soissons, and it was impossible to say how long we could stand out against the gigantic superiority against us; and it wasn't exactly necessary to stay in this position just to fire on Paris, we could begin a little further off just as well.

The commanding officer managed to bring the gun back to Soissons in spite of all the difficulties. The enemy had never seen any of these

guns. Finally we had to destroy this wonder of artillery and brilliant technic in the home country, with shame and bitterness in our hearts.

What it accomplished stands written for all time: one of the famous pages of the artillery of the imperial German Navy!

A few words more in connection with the effect of the bombardment of Paris and some of the results. I will here repeat the comment of an American first lieutenant who was in Paris at that time (Journal of the United States Artillery. V. 1920).

On the 23d of May, 1918, at a quarter past 7, exactly two days after the the Germans had opened their attack on the Fifth Army (British) at Amiens, the people of Paris were terrified by the explosion of some object which had fallen on the Seine Qaui. This explosion was of such strength that it was actually heard over entire Paris. Fifteen minutes later there was a second explosion of the same strength, but this time nearer the Siene, in the Rue Charles V; 15 minutes later there was an explosion on the Boulevard de Strassburg near the Gare de l'Est. Up to this time Paris had never been bombarded with the exception of aircraft, and the first thought of the people was that it was being bombarded by some new kind of aircraft that operated at such a height that it was practically invisible.

The explosions continued through the entire afternoon.

After the first explosions, between 7 and 8 o'clock in the morning, all business in Paris ceased. The shops closed, the interurban railway stopped running, the ticket offices at the railway stations were closed * * * The report of the extraordinary bombardment was telegraphed all over France in a few hours and the news was received everywhere with the very greatest astonishment. During the next days several interesting theories were expressed in the different newspapers. In one instance it was stated that the shells which were fired on Paris were fired from another much larger projectile that served actually as a gun. This large projectile itself was fired from a gun inside the German lines, and after it had reached a certain height, the powder charge automatically ignited and propelled the smaller projectile to a great distance. The theories that the shells were fired from cannons hidden in deserted stone quarries or in woody districts near Paris found much credence and a lively search for such places was started before one knew for certain that there was such a thing. A third theory was that the shells were fired from a pneumatic cannon which was in Paris itself.

There were 183 "hits" within the walls of Paris; 120 fell outside of the walls of the city. Not a single one of the 303 shells fired went blind.

SALE OF OLD WARSHIPS TO THE GERMAN GOVERNMENT.

Source: Reliable.

20 November, 1921.

It is learned on reliable authority that the offer of the British Government to sell the sunken German vessels at Scapa Flow to the German Government for 5.000.000 pounds sterling has been refused.

On the other hand, the British Admiralty has already sold to both Germany and France a large number of obsolete battleships and a

large number of the destroyers built up to the year 1918, for scrap. These vessels will be cut up in the smaller shipyards and the steel used for industrial purposes.

The negotiations were made through the German Government and the contract given out to a large number of the smaller shipyards. It is understood that the British Admiralty resorted to this method on account of the fact that the cost of labor in England is so much higher than in France and Germany and there would be practically no saving on the proposition for the firm undertaking the demolition of these vessels. The prices paid for these vessels by the German Government has not yet been learned.

GERMAN DEVICE FOR REMOVING GASES FROM THE AIR (Applicable to Submarines).

Source: Reliable.

An apparatus developed by Dr. Albert Wolff, of 121 Wilhelmstrasse, Berlin, has been personally inspected and tested. The following is claimed:

(*a*) Removal of CO_2 from air in closed room.
(*b*) Removal of free hydrogen in any quantity without danger of explosion.
(*c*) Removal of chlorine gas (with special device where large quantities are on hand).
(*d*) Removal of SO_2 in any quantity.
(*e*) Removal of malodorous gases due to decomposition of foodstuffs.
(*f*) Removal of poison gases which can be oxidized or fixed with nascent hydrogen.
(*g*) Removal of cyanides.

In this process the nitrogen remains inert in the air after purification while the oxygen is constantly regenerated. CO (carbon monoxide) can not be removed without special provision for heating or by other special means such as combining with chlorine. The device also removes bacteria from the air and was originally designed for hospitals and for patients suffering from consumption.

The apparatus consists essentially of a salt solution (composition kept secret) through which the air is passed. In the smaller experimental devices this solution is ionized by a special electrical arrangement after being partially vaporized. The result is the generation of ozone, free oxygen, and nascent hydrogen.

The details of how this is accomplished is being kept secret. The foul air, after passing through this ionized vapor, is exhausted through an opening into the room.

No complete commercial instruments have yet been constructed. The experimental models were constructed by Dr. Wolff to prove the

principles involved. For special uses such as in a submarine, the arrangements for pumping foul air into the apparatus and exhausting the same into the living spaces would have to be specially designed to meet the requirements. It is claimed, however, that a sufficient amount of salt solution can be placed in the apparatus to enable it to purify at least 5 cubic meters of air in one minute.

One model constructed for purposes of demonstration consisted of a small electric fan mounted as a blower which forced air from room into a duct leading to the chamber partially filled with the salt solution. In this solution were small spheres the size of camphor balls, and what appeared to be two electrodes. (Not disclosed by Dr. Wolff.) The solution is violently broken up into a fine fog through which the foul air passes. The air, after being cleaned in the apparatus, smells remarkably pure and fresh, although without any perceptible trace of ozone. This in spite of the fact that the room was filled with tobacco smoke and the odors of various chemicals.

A slightly larger model was also built which was fitted with an additional air cooler for room cooling, although in the demonstration the cooling device (to be filled with ice and water) was not utilized.

A still larger model was also available for test in which the water in the solution was constantly regenerated and therefore did not require renewal of the solution at definite intervals.

The following tests were made, viz:

(1) A jar containing chemicals of various kinds, with a particularly objectionable odor, was opened and a tube so arranged that the air from the room was pumped through the bottle into the apparatus.

After passing through the apparatus, the air was pure and fresh, with no trace of the evil smelling gases, although the mixture in the container was particularly strong.

Chlorine gas was generated in a special retort and was pumped into the apparatus with the result that no trace of chlorine could be detected by the sense of smell. Dr. Wolff arranged an additional absorption cylinder between the apparatus and the outlet for this test. He stated, however, that the absorption of chlorine presented no particular difficulties and that this gas had been effectively handled in large quantities by German chemists for a number of years past.

The Wolff apparatus will absorb small quantities of chlorine gas without this special absorption cylinder, but large quantities generated by the action of sea water on sulphuric acid will require the installation in the system of the additional absorption cylinder.

Free hydrogen was then generated in a special container filled with zinc shavings and acid. The hydrogen generated was sufficient to cause an explosive mixture in the atmosphere and was burned when bubbled through water. This mixture of free hydrogen and

air was then pumped directly into the Wolff apparatus with the result that no explosive mixture could be obtained at the exhaust end. In the laboratory there was not sufficient research apparatus at hand to determine whether or not the exhaust air from the Wolff apparatus was entirely free from hydrogen. It was demonstrated, however, that a large quantity had been absorbed or fixed and that the residue, if any, was not sufficient to burn under the heat of an open flame.

The tests which could be carried out in the laboratory were rather crude and do not necessarily prove the results obtained. The Naval Attaché has, however, seen the certified statements of various research laboratories and the results of chemical analysis made on samples of air before and after passing through the Wolff apparatus. One certificate showed that where CO_2 was present to the extent of 9 per cent by volume in the air it was absorbed, leaving only 0.2 per cent residue. CO was not absorbed although the mixture contained about 7.2 per cent. SO_2 was entirely absorbed.

No previous tests had been made regarding the absorption of hydrogen in the testing laboratories.

The absorption of bacteria was tested by various laboratories and was certified to be perfect—the resultant air being free from any trace of bacteria and germs. Dr. Wolff claims to be able to effectively produce a dust-and-germ-free atmosphere in a closed room or space, provided the apparatus is constructed to properly handle the volume of air from a mechanical standpoint. The solution, after being used continuously for purifying the air is claimed to be free from any live bacteria or injurious substances.

From the tests which have been witnessed and the reports from the chemical laboratories which have tested the apparatus, it is believed that the claims of Dr. Wolff can be substantiated. If this is the case, the device should be of the greatest practical importance for submarines. The apparatus will handle certain volumes of smoke by the condensation process in a strong electric field. This was fully demonstrated on the model apparatus.

Owing to the possibilities of the device being able to effectively absorb hydrogen, chlorine gas, and carbon dioxide, with a continuous regeneration of oxygen, it is believed that further investigations should be undertaken to determine the suitability of same for use in submarines. The power required to operate the device is relatively small; being slightly in excess of that required for the blowers in the system.

Dr. Wolff will not permit the device to be sent out of the country for tests, as it would be possible for chemists to analyze the salt solution, but he is willing to demonstrate this device in the United States and have the apparatus thoroughly tested in any laboratory

provided his expenses to the United States are paid. It is understood that the firm of Simmons & Senft, of New York, have an option on the apparatus for the United States.

An option on the apparatus for Great Britain and colonies has been acquired by a certain Mr. Garal, of Holland, who is working with an English concern.

GERMAN SHIPPING.

Source: Reliable.

20 December, 1921.

It is learned that the large shipping companies in Germany have made a tentative agreement among themselves for the distribution of new shipbuilding in the next few years. As this agreement has not yet been fully worked out, the details are not yet known even to the German Government. The class of vessels under construction and which it is proposed to construct will consist largely of freighters of from 3,000 to 9,000 tons displacement with about 9 to 11 knots speed. In addition to this, a certain number of combined cargo and freight steamers will be laid down, carrying a so-called intermediate passenger class (between second and third class).

These steamers are destined for overseas service and are expected to carry passengers at a very reasonable rate. It is understood that the first-class passenger line will be operated from Germany to South America, principally to Brazil.

The shipbuilding above mentioned is taking place in proportion as the German Government indemnifies the owners for vessels delivered to the Entente for reparations. The German Government can not indemnify the owners for the total reparation sum but will pay on a basis of approximately five times the 1914 value of the ships, provided this value takes into account the fact that a reasonable amount has been taken off each year for depreciation. The German companies accepting this indemnity are required to spend this money only for new constructions. In this respect the indemnity as paid by the German Government will be in the nature of a subsidy for shipbuilding.

The North German Lloyd Steamship Co. has just recently increased their capital stock by the amount of 250,000,000 marks, which sum will be distributed between new constructions and purchases of vessels from other countries. The shipbuilding program of the Hamburg-America Line is not yet definitely known but includes mostly vessels of the type of the S. S. *Haviland*. It is probable also that the Hamburg-America Line will attempt as far as possible to build twin-screw vessels with high-speed Diesel engines

using a mechanical reduction gear with ratio of 2½ to 1 as described in a subsequent report.

The firm of Blohm & Voss is doing most of the repair work and a large percentage of the new construction for the Hamburg-America Line. They are also building a new floating dry dock large enough to take the biggest passenger steamers such as the S. S. *Bismarck*, in order to replace the dry dock which will be delivered to Great Britain under the reparation terms. The *Bismarck* is practically completed and is ready for delivery to England within the next few weeks.

GERMAN AIRSHIP "L. Z.–35."

Source: German Official War Records.

1 January, 1922.

DESTRUCTION TRIP TO PARIS BY COMMAND OF THE SUPREME COMMAND.

The weather prediction before the trip was: Very cloudy, decreasing cloudiness in the theater of operations, with more clear sky. In the vicinity of the aerodrome slight low pressure. Not especially favorable, in high altitude, northwest to west-northwest winds, to 12 meters per second, with whirlwinds from time to time. Lower temperature about morning. Moon, dependable for trip. In spite of the unfavorable wind conditions the trip was begun, because during the following days a long trip could not be made on account of the later phase of the moon.

The trip was normal as far as Lille, whose signal fires had already been well visible from afar. From Lille, course was set for Douai. According to telephone arrangement searchlights or automobile lamps were to signal the first letter of the following places: Douai, Cambria, St. Quentin, and Moyen. As a consequence of the heavy northwest wind the ship was carried toward Valenciennes. After numerous circlings without sighting any lights, we flew back to Lille and took a new course, passing the above-named places.

After 1.15 the French frontier was passed without the ship being bombarded. The flight now went over Compiegne to Senlis. At the exit of this place a troop camp was plainly visible. It was put under fire by dropping 8 cannon grenades, apparently with success, as the fire went out at once. The flash of the exploding grenades lighted up the camp. The ship soon after this received machine-gun artillery fire from the exits of Senlis (about 2 a. m.).

Because of the reduced speed which the ship had after leaving Compiegne, it was to be assumed that it was fighting against a strong head wind, which, according to the opinion of different meteorologists, must turn toward the southwest during the night. In order to fly over Paris with the wind we flew around Paris at some distance from the west forts until 3 a. m., when the southwest corner of the west front was reached. In the north a searchlight, apparently a watch, searched the Heavens at short intervals: all others remained dark. During this time the report of the approach of the ship must have reached Paris, because searchlights began to play on the west and south fronts: at the same time the ship received fire from the various forts of the west front. Course was then taken toward the northeast.

As soon as the forts opened fire all searchlights began to light up in that vicinity: the first being those of the inner fort line from which the ship was heavily bombarded, when it flew over the city. Also within the city numerous searchlights were distributed near which batteries were set up. During the entire time from 3 to 4.15 the ship was under heavy artillery fire. In the vicinity of the Tour Saint Jacques the searchlights increased in number and the course was taken towards the north. The center of the city as well as the parts lying to the west were then bombarded. In all there were 12 58-kilogram explosive bombs and 10 Goldschmidt incendiary bombs thrown from the ship. The good effect could be observed in most cases. The last explosive bomb apparently hit the plant or buildings of an electrical works on the north side of St. Denis because bright flaming fire with heavy electrical discharge was observed. At 4.15 a. m. the city fort lines were passed.

From the north front the ship was followed with two automobile searchlights almost to Compiegne and often held for a long time in the light cone. Along the roads it received fire from numerous batteries.

On account of the strong head wind the French frontier was not passed until 5.10. As dawn had already appeared here the ship was heavily bombarded by artillery. The return flight to the aerodrome was accomplished as planned in spite of mist. Landing very smooth.

Control and motors worked perfectly. During inspection of the ship the following damage was found:

In forward cells 15, 14, 13, 12 and stern cells 4, 6, 7 were 36 artillery shotholes. A granade splinter, apparently from the battery at Noyon, hit the rear car.

Due to the different gas pressures of the cells as a result of the shot damages, or because of a direct shot damage, the ring girders broke after the landing in the aerodrome.

EXPERIENCES.

(1) In Douai, Cambrai, St. Quentin, and Noyon the letters of the place were given by small searchlights or automobile lanterns. The signals were set up outside of the place and were too weak, and consequently could not be seen from afar. The searchlight at Noyon was plainly visible. It especially aided the orienting on the return trip.

(2) In Paris two types of searchlights were used, small ones with white lights and very strong ones with intense red lights. The smaller were used in a partial mist so that they did not find the ship. The larger, red lighting searchlights, generally found the ship and held it in its light cone (one about 15 minutes). Making the ship safe by steering out of the searchlights was impossible because it was in the light cone of more than one at a time; it was estimated that there were more than 50 searchlights. Signal balls were also used, evidently shot from artillery. They illuminated the ship very brightly for a long time, so that the searchlights could be adjusted quickly and easily.

(3) The painting of the ship light blue-gray with dark clouds recommended itself very much, because the smaller searchlights found the ship with difficulty and the larger ones only after searching. The ship was not found at all by some.

(4) The exhaust mufflers were also apparently a success. During the first flight over French positions the ship received no fire; although illuminated from a small searchlight. Numerous forts threw their light in an entirely different direction from which the ship was traveling. Others began to play searchlights as the ship was over them or departing, generally without finding it.

(5) Near Lille during the return flight a flier suddenly flew obliquely over the ship out of the clouds which were directly before the sun. As a recognition of the identification marks was not possible, owing to the blinding of the sun, and on the other hand an attack was well possible, the aeroplane was bombarded. It turned around at once after the first shot, therefore showing it was a German.

German aeroplanes must be warned against directly flying on an airship because it must be assumed in the territory of operations to be an enemy aeroplane, and the identification mark could only be recognized when too late.

NEW LAGGING FOR STEAM LINES IN GERMANY.

Source: Reliable.

22 December, 1921.

While inspecting the shipbuilding plant of Blohm & Voss in Hamburg, the naval attaché noticed the extensive use of spun glass for

lagging of the steam cylinders of locomotives under repair. This was done originally as a matter of necessity owing to the difficulty of obtaining magnesia and asbestos.

It developed in practice, however, that the spun glass is considerably cheaper and in addition has a higher efficiency as lagging material.

The adoption of spun glass for lagging is now becoming universal in Germany.

ITALY'S INTEREST IN MEDITERRANEAN.

Source: Italian Naval Authority.

22 November, 1921.

Our situation, in brief is this: Externally, before the war in case of trouble with Austria, we could count on the support of France. Now France has great interests in the Balkans especially in Yugo Slavia which Kingdom she helped to create and with which her relations are most friendly. Yugo Slavia holds a long stretch of coast south of Fiume, protected by islands and affording many excellent naval bases from which submarines can threaten our Adriatic fleet. Our side of the Adriatic which has few good harbors can be protected only if we hold the western coast. While we hope that our relations with Yugo Slavia and France will remain good we must always consider the possibility of difficulties arising. As matters stand, if we have trouble in the East we are liable to feel its repercussion in the West and vice versa.

Consider our internal situation. We have a population of about 40,000,000 which is rapidly increasing. Italy being a poor, mountainous country can feed only about 25,000,000. The remainder must get food from foreign countries. We can not get wheat from the Mediterranean area and are now obtaining it from America, Argentina, Australia. At the same time a large proportion of the population depends on industry for livelihood. Here too we must go to countries outside the Mediterranean area for the supplies in raw materials, especially oil and coal. Nearly all these necessities come by sea and this would be even more true in case of war, for then we would have only the Swiss and the Austrian frontier open and we can expect little from those quarters at least for some time to come. The result is that any power which has a navy in the Mediterranean superior to ours could bring us to our knees in a short time without engaging in actual combat, but simply by blockading the only two entrances to the Mediterranean—Suez and Gibraltar. There is Russia, of course, from which we formerly obtained food and oil, but it would be just as easy for a superior navy to cut off supplies coming from the Black Sea. It is not a question of im-

perialism, but of life or death for Italy to have a fleet equal to any in the Mediterranean for we could be far more easily blockaded than England.

Some Frenchmen claim that France should have a larger fleet than Italy, because she has both Atlantic and Mediterranean coasts. That is really in her favor as it would be far more difficult to blockade her—all the more so since France has coal and iron and is almost self-supporting for food. At present Yougo Slavia has no navy, but the relative strength of France and Italy is about 10 to 7 in favor of the former. We do not object to that now, but we could not assume an obligation to keep our fleet always inferior to that of France unless, possibly, England guarantees to keep the outlets to the Mediterranean open. But as long as Italy and France are allowed equal strength we are willing to have fleets reduced to any point—even to zero.

JAPANESE PROPAGANDA.

Source: Reliable.

18 November, 1921.

The following is Japanese Army General Staff Propaganda, being circulated in Japan and China:

America is a menace to Japan, threatening Japan both militarily and economically. Therefore Japan must have a big Navy. America, in time of war, would attempt to cut off Japan from China. Japan must have its iron, coal, and food from China, and for that reason must absolutely keep that line of communication open at all times.

America would try to occupy important points on Asiatic mainland. It is impossible to say what America could or could not do in time of war. She has Hawaii strongly fortified. In time of war America could build unlimited ships. Japan can not build many ships, and so must build more in peace time (to be prepared) than America. Japan must maintain in peace time the Navy she would need in war.

Consider the 8 and 6 fleet the maximum that can be supported in Japan, and therefore went gladly to the Conference.

America's interference in China and Siberia has made it difficult for our naval officers to keep their heads cool. This is why we have gone in for an expansion greater than we can afford. We are willing to reduce to 8 and 6 but must insist on retaining naval supremacy in the western Pacific, in order that America will never be able to interfere with Japan's doings in this part of the world.

JAPANESE PRINCES APPLY FOR SUBMARINE AND AVIATION DUTY.

Source: Reliable.

(9318–I.)

August 26, 1921.

"Another proof of the thoroughness with which the new 'democratic attitude' has permeated the Imperial reigning house of Japan

was indicated on Saturday, August 13, when the two royal princes—Prince Hiroyoshi and Prince Takehiko Yamashina—expressed a desire to take active part in the more or less dangerous branches of the naval service.

"Prince Horoyoshi, now a sublieutenant in the navy, is reported to have filed an application for appointment as commander of one of the submarines attached to the Twelfth Submarine Flotilla, which is to participate in naval maneuvers in Hiroshima Bay early next month.

"Prince Takehito Yamashina is reported to have applied for a pilot's berth on one of the naval aviation planes which are now engaged in the transportation of mail between Tsukiji and Yokosuka."

JAPANESE NAVAL MANEUVERS.

Source: Reliable.

November 7, 1921.

ANNUAL FALL NAVAL MANEUVERS, IMPERIAL JAPANESE NAVY (October, 1921).

The maneuvers were held in the Japan Sea from 21 to 29 October, 1921.

The Green or attacking Force, under command of Admiral Tochinai (commander in chief of the first fleet) was made up of the first and second fleets, with additional vessels temporarily detailed.

The Red or defending Force was made up of the third fleet (Vice Admiral Oguri) and the vessels attached to the Maizuru Naval Station.

The attacking force conducted operations against Maizuru Naval Station.

The supreme inspector, or general superintendent, was Admiral Yamashita (chief of naval general staff). He was assisted by many officers from the naval general staff.

Admiral Takarabe (commander in chief of Sasebo) witnessed the maneuvers on board the *Nagato*, and Admiral Prince Higashi Fushimi went to Maizuru to attend the operations.

Many officers of the Navy Department at Tokyo and from all the naval stations were afloat to benefit by the exercise.

ATTACKING FLEETS (GREEN).

Combined fleet under Admiral Tochinai:

First division. *Nagato*, flagship, and *Fuso* and *Yamashiro*.

Second division (Rear Admiral Kawahara), *Chikuma*, flagship, and *Yahagi*.

First torpedo division (Rear Admiral Shimanouchi):
Tatsuta and *Kitagami.*
Twenty-sixth destroyer flotilla (*Kuri, Nire, Kaki, Toga*).
Fifteenth destroyer flotilla (*Hagi, Susuki, Fuji, Tsuta*).
Twenty-fifth destroyer flotilla (*Kaya, Nashi, Take, Momi*).
Mining division (*Aso, Katsuriki*).
Eighth destroyer flotilla (*Kamikaze, Kisaragi, Fubuki, Ariake, Hatsushimo,* and *Hibiki*).
First submarine division (Rear Admiral Matsumara):
Karasaki, flagship.
Third submarine flotilla (*Nos. 25, 26,* and *27*).
Fourteenth submarine flotilla (*Nos. 19, 20,* and *23*).
Chitose with first submarine flotilla (*Nos. 9* and *10*).
Aero division with *Wakamiya* (aeroplane depot ship).
Third division (Vice Admiral Suzuki), *Kongo,* flagship, *Kirishima,* and *Hiyei.*
Fourth division, Rear Admiral Iida), *Kiso,* flagship, *Kuma, Tama,* and *Oi.*
Second torpedo division (Rear Admiral Kuwashima), *Kitagami,* flagship.
Second destroyer flotilla (*Sawakaze, Okikaze, Minekaze,* and *Yakaze*).
Fourteenth destroyer flotilla (*Tanikaze, Kawakaze, Kiku,* and *Aoi*).
Fifth destroyer flotilla (*Hakaze, Shimakaze, Akikaze,* and *Nadakabe*).

and others, totaling some 50-odd vessels. They assembled in Hakata Bay and Aburadani Bay and rendezvoued on the 21st in the Sea of Japan, passing through Tsushima Strait.

DEFENDING FLEET (RED).

Ships under command of Vice Admiral Sato, of Maizuru:

Third fleet (Vice Admiral Oguri), *Katori,* flagship, and *Kashima.*
Third torpedo division (Rear Admiral Otani), *Mogami,* flagship.
Sixth destroyer flotilla (*Yudachi, Yugure, Shiratsuyu,* and *Mikazuki*).
Thirty-first destroyer flotilla (*Wakaba, Ushio, Asakaze, Nenohi*).
Reserve ships: *Aki, Satsuma, Azuma, Tsushima, Niitaka, Fuji.*
Destroyers: *Umikaze, Yamakaze, Nara, Enoki; Hamakaze, Tokitsukaze, Amatsukaze, Isokaze, Tachikaze, Hokaze, Nokaze.*
Ships belonging to Kure: *Ise, Asama, Settsu, Tenryu, Chitose.*
Fifteenth submarine flotilla (*Nos. 22, 24,* and *34*).
Twenty-first submarine flotilla.
Eighth division: *Tenrui, Tone,* and *Niitaka* (Rear Admiral Osumi).
Ships belonging to Yokosuka: Submarine *No. 28.*

Totaling 40-odd ships. To this was added a special aeroplane division composed of about 25 naval fliers with 25 planes, attached to Yokosuka and Saseho, thus making the aggregate number of ships over 100.

At 3 a. m. 21 October the combined naval brigades assembled on the drill ground at Maizuru Naval Station and at 4 a. m. left (under command of Commander Hashimoto) for Sakai, 120 miles west of Maizuru, on the coast. Units of this force were stationed along the coast between Maizuru and Sakai.

Admiral Sato (commander in chief Maizuru) at 8 a. m. began directing the movements of the forces under his command. The mine layers proceeded to the outer harbor and laid mines or placed obstacles.

The twenty-first submarine flotilla went out of sight to the west. Aeroplanes left Maizuru to reconnoiter, from time to time.

At about 11.30 p. m. 22 October (darkened from sunset) Maizuru was given experience in enduring a sham air attack by 4 planes attached to the defence force.

The naval station searchlights searched the sky. The planes dropped bombs; ships in the harbor fired at them; the naval fire brigade took position in different parts of the city and carried out fire drill.

High seas in the outer harbor made the work of the destroyer flotilla very difficult during the 22d and 23d. The naval brigade kept the commander in chief of the defence force informed of events along the coast by means of portable wireless sets.

The first period of the maneuvers ended at daylight on 24 October. Admiral Sato gave his critical review at the naval station.

The ships with the exception of *Settsu* and *Hizen* left Maizuru.

At daylight of the 24th of October a green force of 8 destroyers and 4 battleships and 11 transports appeared off Jiyogasaki and made an attempt to land troops, which attempt was repelled by the Maizuru naval brigade which deployed to meet the enemy, and kept Maizuru informed of all that was happening. An aeroplane from Maizuru arrived and assisted the brigade by dropping bombs and in other ways. The Green force cleared the waters off Jizogasaki before anchoring the *Fuso* and *Yamashiro*.

Aeroplanes from the *Yamashiro* and *Fuso* reconnoitered the shore preparatory to a series of further unsuccessful attempts to make a landing in the early afternoon and that night. The attempts were continued until 5 p. m., 26 October, when this phase was called off.

About 4 a. m. Green submarines were sighted outside Maizuru harbor and were immediately attacked by the Red air division. Maizuru was darkened very completely on the night of the 24th.

On 25 October, at daylight, the *Kongo*, *Hiyei*, and *Kirishima*, with submarine and destroyer flotillas and air division, established a blockade of Maizuru Harbor and reconnoitered it with their planes. The Maizuru planes reconnoitered the blockading force, searched for the Green forces to the westward. The Red submarines evaded the Green blockade and attacked the major ships off Maizuru. Red captured 1 Green submarine attempting to enter harbor. The submarines put one Red destroyer out of action.

On 26 October fierce engagements at close range took place off Maizuru, submarines and aeroplanes on both sides making a good showing.

On 26 October the Green force redoubled its efforts to force its way into the harbor, but could not overcome the spirited Red defence, which, however, found it equally difficult to get out, but did succeed during the afternoon in getting to sea, carefully guarded by the air division. Some damage was sustained from attacks of Green destroyer flotillas, but rendezvoused with Red main body at point designated at daylight 27th, and with *Kashima* as flagship began action against the concentrated Green force. Fierce fighting ensued. Clear weather, rough sea. Some 150 vessels were engaged for about an hour, submarines and destroyers making frequent contact. Twenty-odd planes simultaneously engaged in air combats overhead.

Later, on the 27th, after the hour's fighting between the two main bodies, all vessels headed for Maizuru.

On the 30th at the Naval Club the supreme inspector read a critique of the maneuvers.

CASUALTIES.

On 26 October destroyers *Okikaze* and *Hamakaze* (division destroyers) collided while engaged off Maizuru Harbor entrance. Both were considerably damaged.

The civilian spectator was killed by a bomb thrown from one of the aeroplanes participating in the maneuvers.

Two destroyers capsized four fishing smacks off port of Tsuruga, when suddenly altering course on being discovered by a Red submarine.

A seaplane fell from a height of 300 meters off Yura, but pilot and machine escaped serious injury.

JAPANESE ACTIVITY ON CAPE LOPATKA, KAMCHATKA.

Source: Fairly Reliable.

16 December, 1921.

A man who claims to be an American has been stationed at Kamchatka for several years in the employ of a fishing company. He states that in 1918 the Japanese built two supposedly fish canning factories on the western shore of Cape Lopatka. One at the extreme south western end of the cape, the other 10 miles further north.

He states that there are no fish, and no one fishes, in this vicinity and that the factories are not being operated, but that all Japanese men-of-war that go to either Petropavlovsk or the Okhotsk Sea put in at both these factories and unload cargo.

There are no piers (all cargo being handled by lighter) but the depth is sufficient to permit ships going close in shore.

At each of these places a tunnel about 200 feet deep has been dug into the hills.

The informant believes that the Japanese are using these two places for stowage of mines and naval supplies, but has so far been unable to confirm this belief.

JAPANESE NAVAL BUDGET.

Source: Reliable.

November 7, 1921.

In submitting its estimates for the fiscal year 1922, the navy department was requested by the department of finance to cut them as much as possible. The estimates finally submitted were 90,000,000 yen less than had been previously planned to expend in 1922 and some 20,000,000 yen less than was spent during 1921, as shown by W–824 of November 7, 1921.

On November 3 the department of finance returned these estimates asking the navy department to further reduce them by 71,000,000 yen.

The situation disclosed by this move is very interesting and significant, but what the outcome will be now with a new premier can not for some time be foretold.

However, the original plan seems to have been as follows: Admiral Baron Kato, being responsible for the completion of the 8-and-8 program, could not with consistency have sanctioned its curtailment, even though he approved such reduction, but during his absence in Washington, Mr. Hara as premier would uphold the decision of the minister of finance, and as minister of the navy he would abide by the premier's decision.

Having accomplished the above move and established a precedent, the next step would undoubtedly have been to slash the army estimates.

There is absolutely no question of any disloyalty between Mr. Hara and Admiral Kato, or of the scheme not having had Admiral Kato's full approval. It was on the other hand a scheme cleverly devised between these two and a means to an end, principally curtailment of the army.

How generally this plan was known can not be guessed, but Vice Admiral K. Kato, the senior naval delegate, must have had some knowledge of it when he stated in San Francisco that "regardless of the outcome of the conference Japan must reduce her naval program because she is financially unable to bear the burden" (which is the truth).

The army must have expected something of this sort would occur when it so bitterly opposed Mr. Hara's assuming the navy portfolio.

As stated above this is a very interesting situation, but what turn events will now take depends much on the new premier.

AVIATION ESCORT FOR JAPANESE CROWN PRINCE.

Source: Reliable.

(9318–I.)

9 September, 1921.

On the morning of the Crown Prince's return to Yokohama, September 3, he was met just outside the harbor by an aviation escort consisting of 9 "Avroes," 4 "Yokosuka" flying boats, and one *F–5* seaplane.

The Avroes flew down from Kasumigaura to the landing field at the Asano Shipyard (Tsurumi) on the afternoon of the 2d. They took off half an hour before the *Katori* rounded the point at the harbor entrance. Six were piloted by British instructors and three by Japanese. Five British pilots took up wedge formation and the three Japanese pilots did the same, falling in astern of the British. The sixth British pilot flew independently for photographic work. The flying was quite low and both formations were extremely well kept. As the *Katori* anchored, Maj. Lees made a nice parachute drop from the leading British plane. The British then broke formation and stunted and the Japanese returned to the landing field.

Just as the *Katori* was entering the breakwater, four "Yokouska" flying boats arrived outside the harbor and landed. They were flown from Yokosuka by Japanese pilots. There was very little breeze, the sea was flat, and all the landings were extremely well done. In about 15 minutes these planes took off, circled the ships several times, and returned to Yokosuka.

NOTE.—The Japanese Navy Department had ordered 200 of this type of plane. The British designers found the tail factor of safety to be 6/10 and that if flown at over a 20° angle the tail would carry away. The above orders have therefore been canceled and all construction suspended.

The *F–5* was flown up from Yokosuka by Maj. Brackley, who handled her beautifully.

This is the first *F–5* in commission. All parts were shipped from England and she was assembled at Yokosuka. The assembling was completed August 29 and tested on the 30th. A British designer stated that the Japanese are not altogether pleased with her because she appears to be so slow. However, the designed speed of 80 miles an hour was made on trial.

JAPANESE SUBMARINES.

Source: Official.

November 7, 1921.

SUBMARINES NOS. 35, 42, 43, AND 45 BUILT AT SASEBO.

The data on above submarines (*No. 45* is of same class) as given in reference is, so far as can be learned, approximately correct, except for number and location of torpedo tubes. All information on submarines is carefully guarded and it is almost impossible to definitely obtain it.

These submarines have six 21-inch torpedo tubes, four bow and two stern. They have no broadside tubes as previously reported. *No. 45* was laid down about the end of December, 1920, and launched September 30, 1921. It is now completing at Sasebo. The hull construction has been considerably altered from that of *Nos. 42* and *43*, when launched. These alterations were made to obtain greater stability, which has been accomplished. The period of roll has been lengthened from 4 seconds to 8 seconds. The time required to submerge from normal surface trim (not awash) varies between 3 and 4 minutes. It it not known how much time was required before the hull was altered. A rough sketch is appended hereto which will give some idea of the hull construction. The stern and bow have been altered to conform very closely to the lines of new Japanese destroyers. There is quite a perceptible flare to the bow. The stern has a long overhang as in some former German types. Both the bow and stern are entirely decked over, but from forecastle to poop there is a sort of bulwark built up from the outside hull with freeing ports at its base. The runway is below the top of this bulwark.

On each side, at about the break of the forecastle, there is an almost elliptical depression of about the following size: Vertical axis 5 feet, horizontal axis 4 feet. At this point there seems to be but a single hull. There are no outboard openings in these two spaces and they are not doors for releasing mines. It might be that there is a hydrophone compartment at this point.

No. 36 is said to be of exactly the same design as *No. 45*. It was laid down in the summer of 1920 and launched about December 20, 1920. It is now at Kure where the machinery is being installed.

Nos. 42 and *43* were launched during the first half of 1920. In October, 1920, they were so far advanced that it seemed they should have been completed by the middle of November, 1920, but for some unknown reason they have been delayed a year. *No. 42* joined the fleet at Maidzuru on October 12. *No. 43* held her first trials October 24. When seen a year ago their hull construction was quite different from that of *No. 45*, although they are now reported to be of same type. It is quite possible that they were unsatisfactory on trials and

were altered. No other logical reason for their long delay in completion can be thought of. There are no submarines on the ways at Sasebo, but *Nos. 62*, *63*, and *68* are to be laid down there during 1922. These are all to be of over 1,000 tons surface displacement. No other details are known and it is believed the plans are not yet completed.

JAPANESE INTELLIGENCE SERVICE IN GERMANY.

Source: Reliable.

1 December, 1921.

At the present time Germany is filled with Japanese traveling in the guise of commercial buyers, technical students, professors, bankers, doctors, etc. In Berlin alone it is estimated from reliable sources there are 2,000 Japanese, not including the large naval and military mission which arrived in Germany some three months ago. These include men of technical training in every field, such as steel, powder, chemicals, electrical engineering, etc. From the evidence available, it is safe to state that every one of these Japanese is acting in the capacity of an agent for the military and naval attachés who are in direct charge of, and control the military intelligence. The consuls also cooperate in this military intelligence as well as the large Japanese commercial concerns having branches in Germany, such as Mitsui & Co. These Japanese have been found in every city in Germany, industriously studying the German developments and trying to obtain the manufacturing secrets of the various industries. The work is so organized that each "agent" makes a thorough investigation of his specialty, several of them working together so that after being permitted to see a sketch or blue print, they can reproduce the same from memory, each one having carefully studied one part of it. This was the method employed by these agents to obtain information on the Diesel engine designs of the M. A. N. Co. at Augsburg. They even attempted to steal the drawing when it was found that the company would not sell under their terms.

The technical men who are reporting to the attachés are introduced to the German commercial concerns by the firms of Mitsui, Mitsubishi, and those whose branches have already established commercial relations. In other cases the technical men are introduced by certain German professors of the Technical High School of Berlin.

These technical experts make careful reports to the attachés who then refer the matter to the technical, naval, and military commission which arranges for the purchase of the information, or for the hiring of German experts to go to Japan. The money for the pur-

chase of this information, and the hiring of German experts is reported to have been furnished from a fund of 60,000,000 yen established for this purpose by a group of Japanese concerns interested in the war industries; this includes Mitsui, Mitsubishi, and others.

In addition to this six Japanese students are kept continuously employed copying out all German patents, obtainable from the patent office.

Another group of "students" make a practice of getting in touch with all inventors and with those German naval and military officers who are out of the service.

In several cases this has resulted to the disadvantage of the Japanese, so the Japanese naval attaché had requested certain information of a technical nature from the German Admiralty; before the answer was given by the admiralty the Germans discovered that the Japanese had attempted to secure this same information from a former naval officer by bribery. Upon this fact becoming known the German Admiralty broke off any further relations with the Japanese naval attaché and has refused any further information to him. This is possible because the large German commercial concerns keep in touch with each other and with the German Admiralty so that the various dealings of these concerns with foreigners are accurately known. This fact has been fully substantiated by the naval attaché, time and time again, since after returning to Berlin from visits to various industrial concerns in Germany he was immediately asked at the admiralty concerning the visit although no intimation had been given beforehand concerning the intended visit.

In this manner, therefore, the Germans are very accurately informed of the various activities of the Japanese in Germany and through their close relations with the Russian Soviet Government they are also fully informed of these Japanese intrigues in Russia and to some extent in the border States.

At the present time the Japanese are apparently concentrating most of their efforts on the powder and chemical industries of Germany.

Before Dr. Poppenburg (the most renowned powder expert in Germany) left for his trip to South America he was in constant touch with the Japanese. Since that time they have been frequently to the Kaiser Wilhelm Institute in Dahlem, near Berlin, in conference with Prof. Haber, who invented the Haber-Bosch process of nitrogen fixation from the air, and with his assistants. They are also frequently seen in conference with Dr. Dottenhofer, director in chief of the Köln-Rottweil Co. (manufacturers of nitroglycerine powder and explosives) and with the "Legnose" Co. It is stated on reliable authority that the Japanese had purchased an interest in

the "Badische Analine und Chemische Fabrik," which is engaged in the manufacture of fertilizer now, but which during the war was actively engaged in the manufacture of poison gases and explosives.

Japanese agents have again approached Dr. Pauling to obtain from him the details of the processes of manufacture of ammonia powder. It is practically impossible to state what information the Japanese have obtained from the Germans regarding powder manufacture, or exactly what secrets they have purchased. It appears entirely probable that they intend to make full use of the German experience in the manufacture of powder and explosives and poison gases if possible. In order for them to use the German powder, however, they will be forced to design their naval guns with a large powder chamber and probably to use the Krupp steel and construction since these factors are mutually interdependent.

It is positively known that the Japanese have made large offers for the Krupp steel for guns and for their gun construction, but, it is believed, that Krupp has not yet sold these secrets. There is positive information, however, to the effect that Krupp has sold to the Japanese the sensitive nose fuse and the star shell (for all calibers up to 30.5 cm.). (Incidentally the sensitive nose fuse is excellent for torpedo-boat defense.)

The German fire control will certainly be purchased by the Japanese unless the United States takes action to stop this. The matter is now pending between the Japanese Mission and the firm of Siemens-Halske.

The Japanese are still making efforts to obtain the German mines from the firm of Bohn & Köhler and from the Carbonite Co. in Harburg. Bolen & Kalk have not yet sold to the Japanese, while Carbonite has sold those types which were delivered to Austria and Turkey during the war.

Since the Control Commission exercised too much supervision over the Diesel Engine concerns, it is believed that no submarine type of engine has been purchased recently in Germany.

It is becoming evident to thoughtful Germans that Japan's position in the world is similar to that occupied by Germany before the war, from an economic, political, and industrial standpoint. For this reason Japan may be expected to profit by German experience to the fullest extent. Those raw materials which Japan must import must be replaced by substitutes. Germany can furnish Japan with a wealth of technical information on this subject; and from the efforts being made by the Japanese mission it is increasingly evident that Japan fully realizes her position and will make every effort to use German brains to strengthen her industrial and military position.

A LETTER FROM POLAND.

Source: Reliable.

1 December, 1921.

I came via Dantzig, in the first place because I wanted to meet Admiral Niblack there, and secondly because I wanted to see something of what was happening in the famous free city, for I had followed that situation fairly closely from the time of my first visit in 1918 with the Armistice Commission. From the very first it was not difficult to follow the lines of British policy there, which was indeed simple enough; and apparently amounted to nothing more nor less than to make the Baltic a British lake. In accordance with this idea, Sir Reginald Tower was sent there—the gentleman who had had such success with his rather heroic efforts to bust up our trade in South America—and later Sir Reginald also became the League of Nations representative. He began at once to play up to the German element and with some initial success, but methods excellent in South America apparently don't work in Danzig, so on the whole Sir Reginald was not a success; and at least as far as Danzig was concerned British policy struck rather a snag. However, this policy went marching on—British support alone made it possible for Latvia and Esthonia to break away from Russia—and everything seemed fine. But again there was a hitch; the British had sewed up the group that they had backed so tight that they couldn't deliver the goods, and a new group pushed them aside. As a result, there are now all sorts of export and import restrictions, duties, etc., in both Latvia and Esthonia, which are certainly not in accord with British policy, and all the Britishers up there were sore—very! But still the policy goes marching on—the British are quietly buying up factories, shipbuilding works, etc., and when Russia opens up, the people on the ground floor will be British.

Altogether it seems a fine piece of work, this combined board of trade and foreign office policy, even though things on the surface do not appear quite as promising as before. The change in Danzig this last year has been very marked. Sir Reginald, who was a failure, has been recalled, and for the moment Danzig seems rather out of the British sphere of influence in spite of the British troops there, etc. However, I don't see that we have any quarrel whatever with the British concerning this policy; they simply make the most of their opportunities while we neglect ours, so by all the laws, the spoils belong to them rightly enough.

Motored to Warsaw from Danzig, picking up horseshoe nails every few miles, for the round cobblestones of these roads apparently act like so many bootjacks for horseshoes. The direct road does not follow the line of the Polish Corridor, and we passed in and out

of Germany and Poland so often that we soon lost count of the number of frontier stations, although the jolt we got at each one will long remain a pleasant memory. The harvests have been excellent in this region, in fact throughout all Germany and Poland, but the yield per acre of the German farms is as much greater than that of the Polish farms alongside, as those of the German colonists in the Crimea were greater than those of their Russian neighbors.

My first impressions of Warsaw were rather happy, for the streets were much cleaner and the appearance of the town was in general much better than when I was here some 10 months ago, for the streets have been paved and many of the buildings have been painted. The greatest change, however, was that there were fewer soldiers on the streets and one was not continually reminded of the horrible waste of an enormous army in a small and struggling country. Having just come from England, I was much struck with the absence here of the great crowd of unemployed that throng the streets of London.

But before many hours I found the unemployment here even more terrible, though of an entirely different kind. Here the unemployment is all in the offices—in the great number of apparently unnecessary clerks, messengers, and functionaries of one sort and another, all smoking cigarettes, drinking tea, lounging about, gossiping half-heartedly—in short, doing everything but work, though great bundles of papers litter every desk.

These same offices rather spoiled my first impression, for, in addition to the waste of loose organization, I very soon learned that there is one way, and apparently only one way, of speeding up one's business, and that is bribery; for graft and dishonesty are rife. Twice on the same day I had to bribe a railroad official in order to buy a ticket. Of course, the usual system of bribery and the way it is condoned is an inheritance of the old Russian system. There is this difference, however, that in Russia one used to bribe the man at the top and in return it was up to him to see that you got results. Here you bribe every petty official all along the route and only hope for results.

I had heard much about the thousands of Poles being repatriated from Russia, so almost immediately after my arrival I headed for Baranowicze, a great concentration camp just inside the Polish border, where from 1,000 to 3,000 refugees have been flocking in daily. En route I stopped at Brest-Litovsk, which is battle-scarred enough to look the part it played in the war as the tide rolled back and forth. The most interesting thing there was the scrawl on the wall of the room where the Bolshevik treaty with Germany was signed. "Neither Peace nor War," it reads, and is signed "Leon Trotsky,

December, 1917. Brest"—certainly not a bad estimate of the situation, especially so, considering the date.

We motored on from Brest-Litovsk to the frontier, past miles of trenches and dugouts, those of the Germans built of concrete and steel and evidently intended for an army of 100,000 to keep back 1,000,000. The dugouts are in many places doing duty now as houses, barns, storerooms, etc., and although they may be somewhat better than the open sky, at least in cold weather, if they are used for long they will surely result in a breed of rats instead of men. All this region is desolate as a burned forest, for in accordance with age-old Russian strategy the armies laid waste the countryside as they retreated, and with a thoroughness worthy of a better cause. In all this great belt stretching from north to south and 100 kilometers wide there is hardly a house intact. Wonderfully thorough they were, these poor Russians, in destroying their own houses and fields.

As we entered Baranowicze a long trail of freight cars came crawling in. As the train stopped, an old man thrust his head out of one of the cars and called to me, "Where are we?" I answered, "Baranowicze." "What country is this?" called another. "Poland," I answered. "What kind of government is this? Is there a king? Who is the king? What will they do to us? Is there any food?" came the shouts in a jabbering of Russian and Polish and German. Then one of the A. R. A. (Hoover Relief) men came up and told them that they would get food at a kitchen a short distance up the road. "When? When? When?" And after they had tasted the cocoa and beans, "Where does it come from?" "From America," I answered. "America? Where is America?" "A place where there is much food," answered one of his more erudite companions.

I took a look into this freight car, typical of the whole train. It was the usual type of small box car, and in it were 47 people of all sizes and ages, all in rags and all filthy, sitting, sprawling, huddled on top of innumerable ragged bundles. The questions asked were principally whether they would really get warm food. Children with swollen stomachs, young men with wrinkled, yellow faces, and women crying silently. No sound, just tears. They came from all parts of Russia. Some of them had been en route for months in the same car, others had trekked across the steppes, and had finally been thrust into freight cars when their horses died and they could drag their carts no further. They had all been caught in the great Russian drag of 1915, and had been taken into central Russia; concerning what had happened in the world in the last six years they had no idea. All they knew were local conditions in the villages where they had lived, and how difficult it was to get food during the journey back.

From Baranowicze we went on to the border, over splendid military roads and then on corduroy roads through great stretches of pine and birch forests; and mile after mile without meeting a single person on the road or seeing a single house or barn. All these fine roads were military roads between military centers for military purposes only. That they served no economic purposes whatever is obvious, since no signs of habitation of any kind are even in sight.

Arrived at the border, we found a long line of prairie schooners coming in. "Is this Poland? Are we out of Russia? God be praised!" came again and again in a jabbering of Russian, Polish, and German. It happened that in this crowd were German colonists from Russia. Though they had been in Russia for many generations they had never mixed with the Russians but kept close together in their little farm colonies along the Volga. When the war came, the Russians would have nothing to do with them nor would the Germans, since they had been Russian citizens for generations. Arrived at the border they were more bewildered than ever, for now they had no place at all to go to; before they had at least the great desire of getting out of Russia, and the general direction of the border for which to set their course. I talked to one peasant who was under 27 although he looked over 40; and small wonder, for he had tramped 5 000 versts and during the last stretch had dragged the cart himself, as the Bolsheviks had taken away his horse.

I examined the cart he had brought all this distance and with so tremendous an effort: an old bed, bits of sacking, and an assortment of battered pots and pans, an old sheepskin, part of a wolfskin, rags, 9 potatoes, a handful of radishes, some pieces of tallow—nothing else. The complete inventory would not net a dollar: he explained that he had had a cow, but the Bolsheviks had taken it away from him at the border. Yet he was much better off than thousands, for having been out in the open air he was in comparatively good health, although drawn and wasted, whereas the others who had come back by train were feeble and diseased and bleeding from bites. The children, of course, were the most tragic sights. They are young only when they smile.

The A. R. A. are doing a fine job up there among these refugees, for they are giving hot food to the starving, and, with the cooperation of the Red Cross and the Polish authorities, are doing a most effective work in delousing them and supplying a few of the most urgent necessities of life. The Y. M. C. A. people are also doing useful work; they are trying to teach the children to play games. There is a big field in the center of the camp, and in this the chil-

dren are arranged in a great circle; the instructor begins with simple exercises and then gives them a football to kick around, and so on. The signal to assemble for games is a long blast on the whistle, and this same whistle is used during the games when he wants to draw the attention of the children. Instinctively when the whistle blows the children grip their cups and form a long queue. All their little lives they have been standing in queues awaiting for food. The great events of life have been when their place in the line has arrived at the place where the food is, and they instinctively form in queues, no matter what they are doing. And even during a concert given there one evening the children automatically formed in queues and stood in line while listening to the music, each child grasping its cup or bowl, a grip that is not relaxed even in sleep.

At the frontier station I found a boy of 11 and his sister of 10, who had started from Samara with father, mother, and sister, but all had died en route. "But how did you find the way?" I asked. "Oh, it was easy," answered the girl, for they traveled along the main road where many people were going, and once in a while they got a lift, and anyhow everybody knew the way to the next town on the way to the frontier.

As I talked to them I noticed a great column of smoke in the distance—a village burning—the third I had seen in as many days. Apparently these wooden villages are forever burning. And small wonder, what with thatched roofs, dry as tinder, each house huddled close to the next, even the chimneys of wood, whose thin clay cracks at times, a fire starts and then the village is finished, for the single village well makes little impression on the fire. One of these fires I saw at night—a scene as weird as it was tragic. Very few men were actually fighting the fire, but perched high on every roof like a giant stork was the man of the household, with mops and a long-handled broom ready to put out the sparks that lighted on the roof. For a time he would keep up the unequal fight, but soon the sparks came too fast, and down he would come through the blazing thatch—and another house gone up in flames! All this time the women and children were carrying water, but the village well soon ran dry, and all they could do was to throw earth on the roofs and walls of the houses nearest the burning ones. But the sandy soil was dry and little help against the flames.

I asked a group of peasants standing around awe-stricken, how the fire had started. "It began—one does not know how—but Nicolai Ivanitch's was the first," came the answer. "It can not be," roared out the village pope, "for Nicolai Ivanitch neither drinks nor smokes and he walks in the path of God. It must be that some evil one put fire to his barn." A few minutes later another burly peas-

ant came up followed by his wife, who was weeping bitterly. He stood looking at his burning barns for sometime, silently shaking his head. "All the year's work gone in an hour, and such fine rye, too. Better even than that of the old master the year of the new machines." "What would you expect?" called out the pope. "I do not see you at the church. God is angry with you that you do not pray." "I have no need of church," came the answer. "I can pray without church; I can pray in the roads, in the kitchen, in the fields." "Take care," shrieked the pope, "You make your sins the worse, you blasphemer." The peasant started to answer, but his comrades, alarmed at his boldness in so addressing the pope, led him away, first going up to the pope, however, and stooping to kiss his hand. I talked with the peasants long into the night, for there was nothing to be done then but to watch the embers. "Such fine rye, too; such fine rye," I heard until morning.

While driving through these great forests, it occurred to me that all this great district barren of houses with only very occasional little clusters of log huts and small clearings, with tiny fields cultivated with wooden harrows and plows made of the branches of trees, and long trails through the forests, all this was physically just about the same as England at the time of the Norman Conquest. And after talking to the few peasants who live hereabouts one feels that their store of information about the world in general is just about as comprehensive as that of the old Angles. For instance, the night of the fire I gave those whose houses had been burned some money. "A gift from America," I said. "America," yes, "what is it?" asked an old peasant. "A great country," I answered. "Where is it? Is it far?" "Very far—across the ocean," I answered. "As far as Siberia?" asked another. I told them about America, among other things about the corn there that had three or four and sometimes even five ears, and large ears at that. But that was a mistake, for it discounted all else that I had said. They had corn themselves; they knew that corn never had more than one ear to a stalk.

Returning next day we passed caravans of carts piled high with logs, their sleeping drivers sprawled out on top. We crawled along very slowly, for of course our motor would have frightened the horses and raised great havoc, unless we were exceedingly careful. These horses had never seen a motor and their eyes were white with terror, as we came up—and extraordinarily beautiful are the eyes of a frightened horse. A little later we passed three peasant girls, decked out in all their finery and many strings of bright colored glass beads, and gay scarfs, but barefooted and carrying their shoes in their hands. They explained that they were bridesmaids, and that they were on their way to the home of the bride some 13 versts away. So we picked them up and took them on to the wedding.

Arrived at the houses they sat down on the doorstep and carefully put on their shoes. Later we saw the wedding procession. The pope was in the first cart—the usual type of cart with diminutive wheels and wicker body—and following him came the cart with the groom and his friends, then the cart with the bride and her maids, all in very gay clothes, and in the back of her cart a fiddler sawing away wildly, two girls repeating over and over again a sort of dirge-like chant, and a third girl beating a drum steadily in rather a tom-tom effect—altogether very oriental. Later the village starosta explained the details of the marriage ceremony and customs to us: from which I judge that there has been precious little change in the last few hundred years, for some of the customs were not a little barbaric, to say the least.

Returned to Warsaw, I promptly headed for Riga—again by motor. Our road led through parts of Poland, which had formerly been Russian, and also through the former German Poland and then through the present East Prussia. We did not need to be told where the former boundary had been, for it became evident in just about three minutes after we had crossed it. Because of the entirely different style of farm buildings and the method of cultivation, it seemed quite another land, although the soil and physical conditions were of course identical. Moreover the German cultivation had been so much more scientific and generally thorough and the land was so much better cared for and so much more productive that the distinction seemed really quite as great as going from green to pink on the map. There was a difference, too, between the former Germany and the present, although less noticeable, of course, for in the present Germany there were many signs of new construction, new barns, new roofs on houses, and much work being done on the roads, all of which is lacking in the neighboring Polish districts. We spent the night at Insterberg, in a room decorated with two brass tablets, one announcing that Gen. Hindenburg had lived there during the German occupation, and the other that the Russian Gen. Renenkampf had had his headquarters there for some months.

The next day we passed through the Mazurian Lake district, which reminded us oddly of Ireland, for the grass is as green and the lakes as blue as the blue of Killarney. As we came through at sunset the sky was aflame with the most brilliant reds, purples, golds, and coppers. I marvelled at them most, I think, because the lakes reflected even the most delicate greys and mauves of the afterglow. I had never before seen such delicate shades reflected in water, for the color of the water usually changes the things: but here they seemed almost as brilliant as the sky itself. The beauty of the scene really was quite inspiring—the purity of the blue and the glory of the reds and golds made one tremendously happy; one felt that all this won-

der of the sunset was God's parting gift, just as the beauty of the sunrise had been His promise. (If it has this effect on a hardened old sailor, small wonder that the people who live there fight for it.)

Passing through Tilsit the following day, one of the officials of the French forces of occupation of the Memel district politely held me up for a time, though I could not guess for what purpose other than to give me an earful of propaganda. Agreeably I asked him what was to be done about this district, since it did not seem possible that its present rather ridiculous and uncertain status could continue indefinitely. He answered that obviously one could not hold a plebiscite, because the inhabitants would probably vote for Germany; nor was it feasible to give it to Lithuania, even though a great many of the 145,000 inhabitants of the districts could speak Lithuanian. He gave no reasons for this opinion, except to mention that it was obvious. He added that the best solution of the question would undoubtedly be to form the entire district into a separate small State under the sovereignty of some strong European power, "that is, a continental power," he added hastily. I noted that in his office was a large picture of the meeting of Napoleon and the Emperor Alexander, which had taken place at Tilsit. A little later, as we were continuing our journey, my companion asked me all of a sudden and out of a clear blue sky whether it had ever occurred to me that there was a thought in the back of the French mind that one of these days, when the Poles had failed, the French would step in. I did not hazard an answer.

As we passed through the villages I noticed a number of shops with fine newly painted signs "Trakters." Hurrah, I thought, Mr. Ford has invaded even the fastnesses of Lithuania. But further investigation developed that these shops contained no tractors, but much 40-horsepower vodka. This was Saturday and, consequently, market day in the villages. Conspicuous among the motley wares for sale, mostly farm products and the simple hardware utensils and crude implements required by the antiquated methods of the peasants, were new spinning wheels. Only the old women knew how to spin, but the necessities of the last few years have resulted in the resurrection of old hand methods, and now almost in every doorway one can see the peasant girls carding and spinning.

As we arrived in Riga somewhat after midnight, and, unannounced, we expected a fine time in finding a roof for the night, but, on driving up to the hotel, we were very agreeably surprised on learning that there were rooms to be had aplenty. In this respect Riga is a distinct contrast to almost every other large city in Europe, because they are all crowded to overflowing, while Riga by comparison seems empty almost to desertion; the population is considerably less than half that of the prewar days, though the Latvians dislike admitting

it. With the exception of the large Russian cathedral there is little evidence, at first glance, that Riga was Russian until very recently, for most of the houses and large buildings are of that flamboyant, overdecorated German style of superabundant, unnecessary curves that correspond to about the worst period of the Early-Victorian era. Likewise, the great majority of the merchants are German, as are also the factories, almost all of which are now idle because the machinery that was taken away during the war has not been replaced. Much of the capital of these factories was Russian, but attempts are now being made to replace both German capital and management by English.

It happened that my first afternoon there I spent with Prince Levine, a man of remarkably liberal views considering that he is a Baltic Baron—views that widely separate him from most of his kind, since he realizes that something fundamental has happened in Russia, and not simply a temporary disturbance. He had had enormous estates, but they had all been expropriated by the Latvian government, likewise the houses, buildings, machinery, cattle, etc. For the agricultural machinery he had been told that he was to be reimbursed, but the value assigned to it was only a small percentage of the actual value, and there was certainly no immediate prospect of any reimbursement whatsoever. He was also leasing from the government a small part of his former lands—about 40 acres. Although most of the land has been divided and distributed only a relatively small part of the acreage previously cultivated has been sown. This is due principally to the fact that the land has been allotted practically to anyone who thought it would be nice to own a little land, and quite regardless of whether or not they knew anything about cultivation of land or were willing to put in the hard work that is necessary to raise grain and make the grass grow. In this way drug clerks, cab drivers, bookkeepers, etc., had received land, but were not working it, and even the peasants who had received additional land were producing comparatively little more than from their former holdings, because having more land they simply cultivated it less intensively.

In the case of the peasants this was due to the fact that they had insufficient horses and machinery to take care of increased acreage, and there is hope of improvement in this respect. But it is far easier to expropriate land than to reverse the process, so that land allotted to nonproducers must continue to be a grave loss. Of course, some of the wiser men now realize this, but what to do about it they don't know. The answer to the problem would be that only those who work their land may keep it, but no political party dares to suggest such a plan.

I had noticed that there was exactly one ship, other than small craft, in the harbor, and that ship was bringing in supplies for the Hoover mission. On making further inquiries I found that the port dues were so high that practically no ship could afford to call at Riga. The steamship rates for passage from Latvian ports to the English ports are just about double those from the Finnish ports, although the distance from the latter to the English ports is greater. Moreover, there are many complaints from the merchants to the same general effect, all of which I found difficult to reconcile with his excellency, the premier's statements. But I was most surprised, on talking to some of the more alert members of the Diet, to hear their rather frank admissions that if they had the thing to do over again they would proceed on different lines. Asked to explain this, they said they would not expropriate all the large estates as they had done, nor would they portion them out in so many cases to people who would not increase production. The best defense I heard of the land law was that it was a political measure advisable at the time it was made and for purely political purposes; even one of the men who had been largely instrumental in putting it through agreed that it was unsound from an economic point of view, and that the fall in agricultural production would for years be their most difficult problem, since it was so much easier to champion a fine theoretical program than to put a sound practical one into effect.

Quite the most conspicuous mark in Riga is the enormous red flag on a huge red flagpole that flies from the Bolshevik legation, which is occupying quarters somewhat larger than those of the entire Latvian foreign ministry, and almost twice the size of the British foreign office.

Like the famous Bolshevik legation in Lithuania, the Red legation in Riga has also been giving a series of dinners, receptions, etc., on a scale not even approached by any other foreign representatives. I heard many accounts of the wonders of the Bolshevik parties; not only as regards caviar and Crimean champagne, but magnificent also from the point of view of flowers, liveried servants, etc. Enormous wages, four or five times those current, are paid to all legation servants. Recently one of these servants was taken ill, whereupon a large amount of money was settled upon him, sufficient to support him for the rest of his life. All this of course created a great stir among the other servants in Riga, but in general it appears that the Red propaganda is having a decreasing effect.

In talking to the Latvians I was distinctly surprised not to find the intense national spirit I had been led to expect, though they are strong against any form of Bolshevism. Though every Latvian ridicules the idea of any union with a Bolshevik Russia, or any other Russia from which they would receive the scant consideration they

had from the old Russian regime, I nevertheless heard repeated comments to the effect that union in the form of a federation or confederation with a liberal Russia was quite a different question. This idea seems to come from the fact that many understand clearly enough that this continuous importation of grainstuffs from America is quite ruinous for Latvia; and even from people on the street one hears that it is not at all impossible (I gathered in general that it was even probable, although it was not so stated in so many words) that if a liberal Russia resulted from the present upheaval, the Latvian people might be better off in such a union with a liberal Russia, rather than keeping up a fight for a political existence not based on economic possibilities.

From Riga I crossed to Helsingfors in a cockle-shell steamer that was tossed about rather carelessly by a very choppy sea. The purser told me that I could pay for my ticket in either Finnish or Esthonian marks, but advised Finnish marks as being more convenient. However, translated into American currency, the price in Finnish marks amounted to about $7 and in Esthonian marks to less than $5, so I decided to endure this inconvenience, which, however, I was not able to discover. I mention this because it is typical of all public finance in this part of the world.

Helsingfors made a very pleasant impression even in the dull grey of an early morning, for it is scrupulously clean. The people were better dressed, shops better stocked, no loafing soldiers, and there was a general air of business—as usual, that my wanderings in eastern Europe had not prepared me for. Altogether it is the neatest, cleanest, and most normal looking city I have seen in a long time. Food is abundant and cheap, and in general the price of living, not only in foreign money, but also in the native currency, and also compared to the wages of the black-coated workmen as well as to those of the manual laborers, is cheaper than in any country I know of. I mentioned this to the various Finns I saw, the local hardware merchant and members of the Diet, and so on—men of standing but of rather diverse occupations. They said that in the first place Finland had made considerable money during the war and there was real wealth in the country. Sweden, however, had made much more money in the war, yet the cost of living there was frightfully high, so it appeared that money had little bearing on the present cost of living.

They attributed their prosperity rather to the fact that they had undertaken no political adventures which had decreased production, and that they had printed no large amount of paper money, had no expensive military establishment, had not enforced any prohibitive export duties, and in fact were doing their utmost to increase export. Of course, their exchange had depreciated considerably, but

that resulted in no very great disadvantage, since it is now quite stable, and merchants could do business on that basis quite as wall as if it were more nearly the normal figure.

Investigation confirmed all this, but developed also that Finland has still another advantage over her neighbors in that her experience as a practically autonomous Grand Duchy has left a considerable body of trained administrators, who realize that expropriation of property is a very poor way of getting something for nothing. So altogether Finland appeared in a very sound and stable condition, economically as well as politically.

From Helsingfors I went on to Viborg, and then to Terijoki and Rajoki, on the Finnish-Russian frontier, where I sat myself down and talked at great length to scores of Russians in the concentration camps, where they are obliged to undergo two weeks' quarantine upon leaving Russia and entering Finland. There were Russians of all classes, many of the Intelligentsia, as well as numerous peasants and repatriated Finns, most of whom came from Petrograd and the northern Russian Provinces. Of course, the accounts of conditions given me by these groups were distorted out of their true proportions by individual experiences, but nevertheless the net result was a rather vivid picture. But it is too big a subject to begin now; I must wait until my next letter to you, for already this has grown beyond all bounds.

Returning from Viborg to Reval I found the city packed and jammed. I had wired some days before for a room and had the assistance of the consulate, but nevertheless I found it exceedingly difficult to get any accommodation at all. Food, though fairly abundant, was very expensive, not only from the point of view of the local population but even in foreign currency—in fact, more expensive than in any country east of France that I have seen. The causes of this state of affairs are almost identical with those which accounted for the same conditions in Latvia, that is, expropriation of the large estates, the portioning them out to men inexperienced in farming, the consequent small production, and the necessity of importing grains from America. To be sure Reval is enjoying a temporary prosperity due to the imports for Soviet Russia which pass through, but other than this there is little trade. Though Esthonia has an enormous advantage over Latvia and her other neighbors in that the factories were not wrecked and the machinery is still intact, nevertheless, only a few of them are working, and those only on a small scale. In addition to the gold exports practically nothing has passed through Reval except a handful of flax, a little caviar, and a few hundred cases of champagne. The custom house officias let me have a look at their books, so I was able to get fairly complete data concerning such of the Bolshevik gold shipments as passed through

Reval: weights, destination, and vessel on which shipped are all recorded, and also the value in Esthonian marks. Figures up to September 14 of this year amounted to 323,000,000 gold rubles, practically all of which went to Sweden, a small amount to Germany, less to England, and one shipment each to France and to the United States. Of course, all this gold eventually got to the U. S. A. via Paris.

It was also possible to get the imports in detail from the custom-house manifests: approximately 80 per cent came from Germany and about 15 per cent from Sweden; from America came two cargoes of shoes and grain, and from England practically nothing except cloth in comparatively small quantities; there was no data available concerning the jewels and valuable furs sent out by the Bolsheviks, as these had been sent under false manifests.

It is of interest that the De Beers syndicate has for over a year had agents in Riga and Reval who have been buying up diamonds from individuals as well as from the Soviet agents, and that they have now moved on into Petrograd and Moscow. I understand that British interests have purchased the large shipbuilding plant at Reval, with the intention of converting it for purposes of railroad construction for Russia.

In talking to the people on the street, that is, the druggist, the manager of the hotel, various merchants, etc., I was as surprised as I was in Latvia to note that although their feeling against the old Russian government was quite as bitter as that against the Soviets, many people stated quite openly that although they would never have any connection with Bolshevik Russia or a reactionary Russian régime, from which they could expect just about the same harsh treatment they had had from the old Russian régime, one could not forget that Esthonia is inextricably bound to Russia by economic ties and that the future of Esthonia must be the future of Russian trade. It is evident that the nationalist issue has calmed down considerably, or else that it never was as strong as we had thought it, for I heard much comment to the effect that Esthonia would certainly find it advantageous to combine with a strong liberal Russia, though they always stated that it must be on the basis of absolute equality with other parts of Russia.

I had heard much suspicion in Europe and America that Esthonia was operating simply as a tool of the Soviet Russia, but I did not find this suspicion justified in any way; quite the contrary is the case. On mentioning this to an Esthonian the almost invariable answer was that it was ridiculous, since no countries on the borders of Russia, which had communication with Russia, could possibly have leanings toward Bolshevism.

I was rather amused on learning that the Bolshevik legation had just bought one of the largest buildings in Reval, in one corner of which the American consulate is located. Already groups of workmen are busy making repairs, renovating and redecorating. So the American consul has now the choice of hanging the American flag out of the window of a building from whose top a large red flag flies from a large red mast, or of crowding himself into new quarters in the already overcrowded town.

Returned to Warsaw, I found the Poles all overjoyed with the very favorable Upper Silesian decision, for although they had talked in rather big terms, they really expected nothing even nearly as favorable. However, they did not consider it good politics to celebrate, and so rather sat on their exuberance. At the same time the new treaty with Dantzig was signed, and as that is most advantageous to the Poles, it has further bucked them up. And just yesterday the premier went down to Prague to sign an economic treaty with Czechoslovakia, which is confidentially expected to be the forerunner of a political treaty. But the best thing that has happened to Poland for a long time is the program of the new finance minister, which oddly enough is based on sound common sense and not the usual theories of getting something for nothing. Moreover, it is being put into effect with considerable energy and much courage.

So the Polish mark has been rising and rising, until now it is almost out of sight. Everyone predicts that it must soon come an awful cropper, but I am not so sure, for the country is really in pretty good shape. The harvests have been excellent, there is plenty of oil, wood, and all manner of raw material like bristles, hides, etc., ready for export. All the country needs is a little common sense and courage on the part of the Government. So altogether the Poles are now on the crest of the wave. All the lovely ladies are buying new bonnets and the men are having vodka and champagne for lunch. Indeed, all is gay in Warsaw.

I've said almost nothing about Russia. Briefly, I'll epitomize a few of the things that appear to be really established concerning the Russian situation:

1. The revolution is over; evolution has begun and with a tremendous rush.

2. The turn to the right is sincere. It may be that it comes not from principle or sound reasoning or anything but a sense of expediency, but it is definitely the result of trial and error and is based on the simple conviction that mere theories, no matter how splendid as catch phrases for political agitators, won't work in a practical world.

3. There is only one government in Russia and that is the R. S. F. S. R.; no other is even in sight. It is stronger than ever and

shows no signs of coming the cropper that is predicted for it so often.

4. The Red Army, with a ration strength of about 2,000,000, including about 450,000 Tchresvechaika troops, is at a low ebb, and useful only as far as keeping the present régime in power. It lacks artillery and ammunition, as it has never recovered from the Polish disaster. Moreover, it is widely scattered and transportation available could not concentrate it, much less keep it supplied.

5. There is much talk outside of Russia concerning rivalry between Trotsky and Lenin, and the growth of the former's popularity and power. This is bunk. Trotsky is distinctly not popular, though he is efficient, remarkably energetic, and has great initiative. There can be no comparison, however, between the influence of the two. Lenin could eliminate Trotsky to-morrow, and without any earthquake at all. For one thing, Trotsky is a Jew, and even though the Jews are running the show now, the Russians fundamentally detest Jews, and can never forget that Trotsky is a Jew. Moreover, Trotsky is out for Trotsky only; Lenin is out for Russia. The difference between the two is as great as the difference between their aims. Lenin has evolved from an agitator into an interesting study, then into a great power, and it seems on the cards that he will end up as one of the greatest men of his time.

6. The Russian gold and jewels are nearly exhausted, there is no material for export, and there can be none for a long time. Consequently, the Bolsheviks will go to any lengths to secure foreign credits, even to the extent of recognizing all Russian debts. They have invented a clever formula for this, i. e., that any claim for the Russian debts must recognize the counterclaim for damages to Russia caused by anti-Bolshevik expeditions backed by foreign powers, and, second, that Poland, Latvia, Esthonia, Finland, etc., must bear a proportional part of the Russian debt. However, they would discard this formula or accept any condition whatever, for the sake of foreign credits.

7. The famine is as wide in extent and as severe as the worst reports indicate. No matter what is done now it appears certain that millions will perish this winter. The real cause of the famine has been the progressive decrease in acreage all over Russia, due to the peasants having no interest in plowing more than enough for their own immediate needs.

8. The American Relief Association (Hoover Relief) is working splendidly according to all Bolshevik advices. There is no doubt that this has enormously enhanced American prestige in Russia, and Russia's good will toward us, which, in times to come, will certainly be no little asset.

9. The Communist Party is losing its grip. Many people entered it, not from conviction, but because it was the way to promotion and pay. They are leaving it for the same reason, i. e., there are no more spoils, and they can make much more money outside of the ranks of the Communist Party, i. e., by opening a shop, etc., than in it.

10. The indications are that the eventual solution will be a liberal government of strongly socialistic forms, based on a soviet, but divorced from Communism and Bolshevism. After all there is nothing fundamentally wrong about a soviet system; it is simply a vertical division instead of the lateral division that we have. And it has the great advantage that it seems to give the answer to a real need peculiar to the Russian people.

11. The very real disadvantage in that land now distributed in accordance with political rather than economic considerations is nevertheless not unsurmountable, even through the present numerous small holdings can not be worked as efficiently as can a large holding which can afford better implements and machinery, as well as more scientific management. The answer to this problem appears to be the "artel" for which the Russians have a very great genius. These cooperative societies, managed by the peasants themselves, had had a great success before the war, and still greater success during the war. They have endured even the chaos of the last four years and have recently been further extended. Indications are that their future development is the solution of a hundred and one problems that now afflict Russia, and because such developments would be strictly along the lines of Russian genius it is full of hope.

SPANISH NAVAL APPROPRIATION.

Source: Spanish Press.

23 November, 1921.

Owing to the present discussions on the subject of naval disarmament, much interest is being taken in the efforts of the minister of marine to obtain from the Cortes appropriations for the increase of the Spanish Navy.

During the past week the minister of marine introduced his program for an annual appropriation of 42,000,000 pesetas for new construction, resulting in a long debate. He set forth a plan whereby a total expenditure of 590,000,000 pesetas is required for the building of the remaining cruisers and 18 submarines of the 1915 program, which are said to be needed.

Attention was called to the fact that France has a budget of 1,230,000,000 francs, while Spain does not expend more than 119,000,000 pesetas.

An interesting criticism was brought up in the course of the debate by an opposition senator, who pointed out the inconsistency of the pretentions of the minister of marine. Other nations (including France) are seriously considering disarmament, and further expenditures in this line would be out of place, he stated, in view of the fact that present estimates of the Spanish deficit are in the neighborhood of 4,482,000,000 pesetas.

CONDITIONS IN SIBERIA.

Source: Reliable.

(15136.)

19 December, 1921.

The Far Eastern Republic of Siberia extends from Lake Baikal to the Pacific Ocean with the capital at Chita. The population is estimated at 2,000,000. An army of 60,000 is now maintained. Its arms and supplies are for the most part obtained from Russia. The main support has been from two loans granted by the Russian Government.

The present Siberian Government has been in existence for 20 months and has been in continued financial straits. The Government and the army have been without pay for months at a time and have, nevertheless, gone on with their work.

The general attitude toward Americans in Siberia is one of friendly feeling and a desire for trade relations. There is, however, a serious element in their attitude in that the people feel that when American troops entered Siberia with the announcement that they had come to assist in preserving the integrity of Russia, and at the same time led the Japanese by the hand into Siberia, they are now responsible for doing everything they can to get the Japanese out. Failing to do what they can at the present time in this respect, the friendly feeling of the Siberians will be changed to animosity.

The Siberian Government, according to the informant, believes that American recognition will greatly assist in expediting the withdrawal of Japanese forces from Siberia.

The Japanese are reported as having 40,000 troops in Siberia, and are reported as having set up a government at Vladivostok composed of the Semenov element. They have equipped several thousand of the remains of his reactionary soldiers. The Japanese at present are attempting to gain control of Harbarovsk, and it is doubtful if the Siberian troops can hold out against them.

In general, the Siberian situation is a hopeless one for the Far Eastern Republic without American recognition. They are power-

less against the military strength of the Japanese and at present can expect no material assistance from Russia.

Upon withdrawal of the Japanese it would be probable that the Far Eastern Republic would eventually join Russia as a separate State in a union.

In regard to the present government ownership of all land, it is stated that this policy has for one reason been adopted to prevent the Japanese from obtaining a permanent hold on any land in Siberia.

General conditions in the interior have been improving both as regards food supplies and disease, also operation of the railroads. A weekly train runs through to Irkutsk and the Northern Branch of the Trans-Siberian Road is again in operation.

The Dairen conference was a failure in that the Siberian representatives refused to trade the benefits of Japanese withdrawal for what would have amounted to actual loss of sovereignty.

The general policy of the Japanese can be summed up in saying that they will withdraw from Siberia on conditions that the Far Eastern Republic submits to such terms and conditions as will permanently prevent Russia or Siberia from reestablishing a military position on the Pacific coast that would threaten Japanese interests. This, of course, can not be arranged without loss of sovereignty to Siberia.

The informant attaches considerable interest to the recent declaration of Trotsky to his army requesting them to be vigilant on account of the refusal of the Japanese to withdraw from Siberia.

With regard to Chinese relations, the informant states that Siberia has no desire to regain Port Arthur from Japan, as that territory rightfully belongs to China.

U. S. NAVAL DETACHMENT IN TURKISH WATERS.

Source: Official.

1 December, 1921.

Destroyers have been maintained at Samsoun and Braila for the protection of American interests. The U. S. S. *Williamson* was dispatched to Mersina to investigate and report on alarming conditions in Cilicia. No report has as yet been received, but it is understood that practically everyone is evacuating at the approach of occupation by the Turks. The following paragraphs of a report made by Rear Admiral Bristol are quoted:

One of the effects of the Franco-Turkish pact recently signed at Angora has been the throwing into a condition of panic the Christian part of the population of Cilicia. This is to be turned over to the Turkish Nationalists within a

period of two months. Many of these Christians have very closely affiliated themselves with the French against the Turks in many instances, having even gone to the point of bearing arms against the Turks. They fear if they remain in Cilicia with the Turks they will have revenge in a violent form inflicted on them. However, it would seem the part of wisdom for most of these Christians to remain where they are rather than rushing off into other parts of the world where the difficulty of earning a living will no doubt be very great. It seems a very bad precedent in view of the some two or three million Christians in Anatolia, where no doubt Turkish rule will ultimately be recognized in full force.

From private letters from American relief workers at Ismidt it was feared that Americans and Christians generally in that area might be in danger, but from an investigation made by the commanding officer of the U. S. S. S. C. *No. 96* it appears that there is no visible reason for fears on this score. The government is conducting itself in an orderly and proper manner, and the feeling toward Americans seems very good.

The subchasers *No. 96* and *No. 338* are being continued in commission by approval of the Department inasmuch as it was impossible to sell them. They are in need of repair work but no money has been authorized.

The following destroyers are now attached to the United States naval attachment in Turkish waters:

U. S. S. *Overton*.
U. S. S. *Sturtevant*.
U. S. S. *Williamson*.
U. S. S. *Fox*.
U. S. S. *Sands*.
U. S. S. *Childs*.
U. S. S. *McFarland*.

The *McFarland* will accompany the *Utah* when she leaves for Pola on December 5.

ITEMS OF GENERAL INFORMATION.

The U. S. S. *Reuben James* is at Danzig acting as senior American vessel in the Baltic.

The U. S. S. *Childs* arrived at Constantinople on November 27. She was relieved as senior American vessel in the Baltic by the *Reuben James*, and en route to Constantinople stopped at Naples in accordance with the wishes of the Department to transport Gen. March to Constantinople. She remained in Naples several days, but as the naval attaché in Rome was unable to communicate with Gen. March, she left Naples for Constantinople without him.

The situation at Constantinople is a good deal like the eddy on the side of a current in that it whirls rapidly but makes very little advance. The tense situation between England and France with regard to the French treaty with the Kemalists at Angora has very little effect on the surface here to disturb the relations between the French officials and their Allies. This is largely due to the popularity and tact of the French high commissioner, but at the same time there is at least a local feeling of partnership between the French

and British in their desire to see the Greek occupation prove futile. The situation to me personally seems to indicate that the lion's share of the spoils is to be divided up between the French and British, and the other Allies are to get as little as practicable. I have been much impressed with the deep appreciation of the Turkish people and the residents of the Near East in general of the disinterested work done by the United States Navy, Roberts College, the Constantinople College, the Near East Relief, the American Red Cross, and the Y. M. C. A. activities. My own impression is that we would have everything to gain by resumption of diplomatic relations with the Turkish Government at an early date, and on the other hand almost nothing to lose, were it not that the real power and influence is with the Kemalists now trying to expel the Greeks from Anatolia. Our participation in Allied councils is very slight, and we are only drawn into them when they wish us to haul chestnuts out of the fire for them. We unquestionably hold the balance of power in this region because of the influence we have with the people from the cases above cited. The Turkish Government is very cleverly playing each Ally off against the others, and as we have no political interest at stake they find it very easy to be friendly with us. The growth of the American colony of business men in Constantinople since 1919, however, is simply amazing. The resumption of diplomatic relations, leaving the Allies to squabble over the division of spoils, seems to me to be a very wise diplomatic stroke, at the earliest moment the Kemalists and the Turkish Government at Constantinople come together.

CONSTANTINOPLE.

Source: Official Report of Vice Admiral Niblack.

10 December, 1921.

It is universally admitted that the visit of the *Utah* did more to establish friendly social relations with the Turkish people than any other event in recent history, as it brought them out, both through invitations on their part and invitations on our part.

I can not too strongly express my admiration for the influential position which Rear Admiral Bristol has established for himself in the Near East. In one particular respect his attitude has been counter to the past American policy in the Near East and of probably far-reaching importance in the future, and that is in opposing the attitude of the old-style missionaries in educating the Christian population of Turkey in the tendency to take a hostile and rebellious attitude towards the Turkish Government by religious education and language teaching, which made those with whom they dealt a foreign and unsympathetic group in territory governed by the Turks. It speaks well for the broadmindedness and religious toleration of

the Turks that they have permitted our missionaries to create in their midst these practically unsympathetic communities. No other European government would tolerate this. Rear Admiral Bristol advocates most strenuously the teaching of the Turkish language in these schools and the endeavor to make the Christian population loyal subjects of the Turkish Government, with a view to aiding in the rehabilitation of this region. There is every reason to believe that most American communities in the Near East are convinced that Admiral Bristol is probably right and that now, at least, is the time to modify the policy of the past, thereby gaining the confidence and good will of the Turkish people, for it is certain that the Kemalists, or Turkish Nationalists, will otherwise later on eject the missionaries and undo much of the splendid work which has been done in the past. Whether the high commissioner's views are sound or not remains to be seen.

I personally came to Constantinople with all the usual ignorance and prejudice against the Turks created by years of propaganda. I have been astonished to find them amazingly tolerant of religious beliefs of others, honest in the ordinary financial affairs of life, simple in their wants, frugal in their mode of life, and patient to a degree under misgovernment and oppression. The educated classes seem to be broad-minded, of charming personality, dignified and hospitable and seeming only recently to have come to the real appreciation of the disinterested character of the American activities in the Near East. Now is the psychological moment for the United States Government to establish itself with the Turkish people and Turkish Government in a position of dominant influence. It appears that the League of Nations had tendered to Dr. W. W. Peet, secretary and treasurer of the American Foreign Mission Board, and an American citizen, the position of High Commissioner of the League of Nations in Constantinople as its representative. In the letter tendering him this position it is provided that a mixed board shall deal with the reclamation of women and children from Turkish harems. This in itself is offensive to the Turkish people and to their religion. It is a gratuitous assumption that the Turks are less moral than Christians, a proposition which would be very difficult to prove since anyone acquainted with the Turkish people knows the exact reverse to be the fact.

It is fortunate that our own Government has not associated itself with this proposal. The entire activities of the American people and its representatives have been of a disinterested and helpful nature and it is earnestly recommended that whoever succeeds the present high commissioner shall be a native-born American statesman of American antecedents and of the highest character and reputation as there is now no more important diplomatic post in Europe. The policy of the Allied Powers in the Near East has

been of such a selfish, grasping, and overreaching character that the Turkish people have ascribed to them a moral character which they seem to have earned by the conduct of their affairs.

They now look to our Government as the only one which is disinterested enough to be able to help materially in the rehabilitation of the Near East since they regard the other powers as merely seeking economic domination and they would gladly have had us take over the mandate of this region. There is, of course, no such possibility but, through the confidence inspired, it is possible that the net result will be of great commercial advantage to our people in the immediate future.

I had originally intended to leave Constantinople on November 26 but I extended the time so as to be able to return all the civility shown me.

At Gallipoli about 35 officers and 400 men of the *Utah* and *McFarland* visited the battlefields from 9.30 a. m. to 4 p. m. December 6, and were escorted by officials of the Imperial War Graves Commission (British) who took occasion to praise the fighting qualities of the Turks and their clean-handed methods.

The Sailor's Club (Y. M. C. A.) at Constantinople, in charge of Mr. Nelson H. Poe, deserves more than a passing mention. It is most efficiently equipped with a library, reading and writing rooms, billiard room, dormitories, canteen, bath rooms, laundry, and restaurant, in the latter of which they served some seven hundred to nine hundred meals daily. They conducted excursions, church parties, shopping tours, boxing matches, basketball games, dances, moving picture shows, and other entertainments. The personnel is composed of an unusually fine body of intelligent and enthusiastic workers of both sexes. It is constantly expanding, but with a diminishing naval personnel due to the withdrawal of our ships from these waters. They are about to open a large gymnasium completely equipped for all athletic and social purposes for a large number of men. The Sailor's Club contributed in a marked degree to the success of our visit. The conduct of the crew of the *Utah* elicited praise from all quarters.

The unusual feature of Constantinople at this time is the presence of thousands of Greek, Turkish, Armenian, Georgian, and Russian refugees, all of which are looked out for by the Near East Relief and by people of their own nationality residing in Constantinople. The 35,000 Russian refugees are, however, on the hands of the American community and the Allied Forces occupying Constantinople. The *Utah*, during its visit, contributed to the support of the Russian refugees from the left-over food of all the messes amounting to about 150 rations per day, by gifts of money, amounting to $743.80, by gifts of old clothing, and by gifts of approximately 5 tons of flour, beans, tinned vegetables and meats.

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 3—1922.

15 MARCH, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1922.

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 3—1922—15 MARCH, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

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POLITICAL TENDENCIES OF ARGENTINE ARMY AND NAVY.

Source: Reliable.

22 December, 1921.

The Buenos Aires "La Razón" is commenting on the political opposition of the Brazilian Army against Presidential Candidate Bernardes. It quotes with approval the speech made by the Superintendent of the Argentine Military Academy (Col. Justo) to the graduating class. In this speech Col. Justo reminds the graduates that their devotion to the Army and to the country should operate towards renunciation of politics, and ends with "Young gentlemen: never take part in politics."

As a matter of fact, the older officers do play politics; so that Col. Justo's advice indicates a tendency rather than an established condition.

So far as the Navy is concerned, the younger officers are as free from politics as are our own. And so, actually, are the older officers, although the Navy is being punished for their former political activities opposing the Irigoyen Government. As already reported the only officers now on the active list who took part on the Irigoyen side of the revolution of 1890 are Rear Admirals Zurueta, Montes, and Irizar, and Capt. Lan. These officers have been appointed by President Irigoyen to the following duties, respectively: Minister of marine; commander in chief of the fleet; commander first division; commander second division. Moreover, the President some months ago sent to the Senate the nomination of Rear Admiral Montes as vice admiral (thus jumping over Rear Admiral Juan A. Martin, formerly minister of marine under a Conservative administration). The Senate (being Conservative in majority) has not confirmed this nomination; and in the meanwhile Admiral Montes has passed the age in grade when he should retire. Nevertheless, he is being held on the active list and in command of the fleet in violation of the law. It is said that the President has stated openly that he will never allow the promotion of Admiral Martin, nor of Capt. Callindex (superintendent of the naval academy). It is said that the President is much offended at the latter because it has come to his knowledge that the naval officers on duty at the naval academy refer to the President as "El peludo"—i.e., "an armadillo," a derisive nickname for President Irigoyen.

There are now widespread rumors of revolution in case the election for governor of Buenos Aires Province is jockeyed unconstitutionally by the Radical Party, or if Irigoyen attempts to obtain a second term (which is prohibited by the constitution). Naval officers say that if such a situation should arise the minister of marine (Zurueta) is too weak a character, too much of a politician, and too little of a naval officer to resign rather than transmit an unconstitutional order to the fleet. They say that Admiral Montes would try to carry out the order, but that the order would not be obeyed.

It is very hard for an American to take seriously the rumor of such a revolution, or to imagine the President openly defying the constitution of the republic. That it would surely result in the assassination of the President and the destruction of the Radical Party is easy to foresee. Nevertheless, the rumor is being taken seriously by many sensible and well-informed Argentines.

BRIGANDAGE IN SANTA CRUZ AND CHUBUT, ARGENTINA.

Source: Reliable.

29 December, 1921.

The general condition of disorder produced by armed brigands in Santa Cruz has spread to the vicinity of Comodoro Rivadavia. Refugees from the recently raided town of Las Heras are arriving at Comodoro Rivadavia.

The cruisers *Almirante Brown* and *9 de Julio* are at Comodoro Rivadavia, and the landing forces are ashore guarding the railway, the petroleum reservation, and the neighboring colonies. One detachment of 70 sailors have been stationed at Colonia Sarmiento. The *Belgrano* is en route from Puerto Militar to Comodoro Rivadavia; and when her landing force is ashore, there will be some 1,000 Army and Navy personnel in these territories operating against the brigands. It is rumored that the Spanish and the Italian consuls at Puerto Deseado have been seized and carried off by the brigands.

Lieut. Col. Varela, commanding the Tenth Cavalry in the disturbed zone, reported on December 22, 1921, that all of the territory is now tranquil except in the region near San Julian and Puerto Deseado. He reports two engagements with the brigands: one near Jaramillo, where 30 bandits and 100 horses were captured; and another at Tehuelches, where a 40-minute fight was had with 50 brigands who arrived in 5 automobiles. The brigands finally retired, leaving 15 dead and many wounded. Two soldiers were wounded.

The opposition press criticises the confident tone of Col. Varela's telegrams, and attacks the Government for not sending adequate forces to round up or kill off the marauders. Recently a company

of newly recruited gendarmes were sent to Santa Cruz, and they arrived in a mutinous condition on account of personal violence inflicted upon one of the men by a noncommissioned officer. The troops at Liniers, commanded by Lieut. Col. Rufino, have orders to be ready to embark immediately for the southern territories. The press complains that a very large force must be sent, and should be sent now, to stay until order is restored, and until properly organized and disciplined gendarmerie can maintain tranquillity.

On December 17, 1921, a column of soldiers and a part of the *Almirante Brown's* landing force, under Capt. Anaya, Tenth Cavalry, had a smart engagement with 250 bandits at Mata Tapera (180 miles northeast of San Julían), who were marauding in the Deseado-San Julian sector. The bandits were routed, losing their chief (Arguello—a Paraguayan, alias Tres Dedos) and 18 more killed, 193 taken prisoner, 2,000 horses, 140 mules, provisions, 65 guns, and 61 revolvers were taken. The losses of the military force are not given. It seems proved that whenever the military overtake the bandits (who apparently are not well armed), it results in severe loss for the bandits and practically none for the soldiery. Argentine Naval officers say that Chilean noncommissioned officers have been found among the bandits.

GREAT BRITAIN.

Source: Reliable.

17 January, 1922.

POLITICAL VIEWS.

Viscount Grey of Fallodon (formerly Sir Edward Grey, minister of foreign affairs in the Asquith Cabinet), is one of the leaders of the Liberal Party and after having been out of politics for four years or more has recently begun to take an active part in them. Addressing a meeting of the League of Nations Union at Bristol, on January 9, he expressed the opinion that notwithstanding the great achievements at Washington and all that might be done at Cannes, he still believed that the most practical way of promoting international cooperation and of securing the peace of the world was to be found in the League of Nations.

He had nothing but admiration for the great work done at the Washington conference, and felt that the United States Government deserved the thanks of the world for summoning it. He felt that the future peace of Europe depended upon strengthening and developing the League of Nations.

He referred to the dispute about submarines at Washington as "one regrettable incident," and he further stated that the experience of war

reminded us that once war broke loose rules of war and humanity were apt to go by the board and nothing counted except force. Therefore, the only way we could be sure that submarines would not be abused in future wars was to provide that there should be no submarines.

Lord Grey expressed the opinion that "a very substantial achievement has been done at Washington in reducing competition in naval expenditure."

Lord Grey stated in the opening portion of his address that he did not in the least know at that moment whether all the things he had to say would be found to be in accordance with the views of the political party to which he belonged.

Lord Derby addressed a meeting of the council of the Lancashire division of the International Union Association at Manchester on January 14, which was largely a political address referring to the subject of the proposed general election and also touching on international matters as they involve Great Britain. With regard to the Washington conference he used the following language:

> As yet its labors are incomplete, but I think that you will realize, as I do, that Mr. Arthur Balfour has played a great part. I believe that great things will come of that conference; that it is not in opposition to but in support of the League of Nations, and will do much in the future to prevent war between races.

UNEMPLOYMENT SITUATION.

The suspension of the contracts for the four British battleships has intensified the unemployment situation on the Clyde and at Newcastle. A conference of mayors was held at Newcastle on January 10 regarding the suspension of this work, and it was agreed to urge the Government to proceed with the battleships, as America and Japan were building. It was also suggested that the Government should advance a loan of £10,000,000 to the Cunard and other companies to build passenger vessels.

Sir Robert Horne, the chancellor of the exchequer, was interviewed about January 10 by Lord Provost Paxton of Glasgow, on the question of suspended warship contracts, and sent the latter a letter stating that he had very carefully considered the difficulties caused by the cessation of ship building but was unable to see how the Government could assist. He said, particularly, "It is very difficult to say in what direction the Government can interfere in the creation of work in substitution for any ships it may decide to postpone."

THE CANNES CONFERENCE.

The meeting of the Supreme Council at Cannes was discontinued on January 12, owing to the fall of the Government in France.

The causes of the resignation of M. Briand are doubtless numerous, but it seems to be the general opinion as voiced by the press that it

was due mainly not so much to dissatisfaction in France with the proposed Anglo-French agreement as to the feeling that France was again being put off in the matter of German reparations payments.

It has been apparent for some time to English statesmen and to the well-informed English public that more had been demanded from Germany than she could possible pay. The same must be equally apparent to well-informed opinion in France and the members of the Government, and it is necessary, therefore, to conclude that the continued insistence of the predominating party in France on exacting the reparations from Germany has some ulterior motive.

In the opinion of the writer it is the deliberate intention of France, or at least of that political element which is headed by M. Poincare and his associates now in power, to force the question of reparations to a point at which France will feel justified in her own eyes, and perhaps to some extent in the eyes of other nations, in occupying German territory up to the west bank of the Rhine.

If this surmise is correct, it explains why the French have insisted on keeping a large army in being and held out at Washington for a practically unlimited submarine navy. In other words, the French are not only looking for security against attack, but desire to amass sufficient strength to carry to a successful conclusion what would amount to an aggressive war against Germany.

France doubtless realizes that among the possible results of such action on her part would be the hostility of Great Britain, and there may, therefore, be something more than surmise in Mr. Balfour's statement that the French demand for submarines was aimed against Great Britain.

The London newspapers do not in general express the opinion above set forth, but that fact does not necessarily mean that the opinion is not held. It would probably be a dangerous opinion to express publicly. The following from the London Observer of January 15 is quoted as approaching to an expression of such a theory:

> We are in favor of giving France every security for her 1869 frontier. It is not a matter of condescension on the British part, as some French and some British commentators have misrepresented it. It is just as much a British as a French interest that that frontier should be solidly guaranteed. What we are not prepared to guarantee, let us say frankly, is a permanent military occupation of German territory or any artificial arrangement for the disintegration of the German Reich. * * * For the 1869 frontier we would fight as we fought from 1914 onward. More could not reasonably be asked of us. We went into the war against German aggression, for the liberation of Belgium, the integrity of France, and the restoration of Alsace-Lorraine. We did not fight for annexations from Germany or for the Rhine frontier. * * * No British Government could go beyond a guarantee of the frontier of 1869, including Alsace-Lorraine. M. Poincare, on the contrary, has hitherto been in favor of the permanent occupation of the left bank of the Rhine, and of marching over the Rhine at need in the attempt to enforce indemnities on the impossible scale of Versailles.

The following quotation is made from an article by Sisley Huddleston in The Fortnightly Review of January, 1922, the above article being entitled "Should the entente continue?"

Unless we strike a bargain—as we can over this Wiesbaden accord, to which France holds—France is in a position to render futile any British proposals for moratorium or reduction. If we deny France the full benefit of the Wiesbaden accord, there is nothing to prevent her from reverting to the strict terms of the treaty and of the schedule of payments, and in the event of a German default (which is inevitable) from marching into the Ruhr. The occupation of the Ruhr is a policy of despair. It is a destructive policy. It will destroy for England the beneficial effects of a business policy. It will create anarchy and misery on the Continent. It will obliterate the last hope of restoration. It will be bad for France, worse for Germany, and fatal for England.

BRITISH SHIPS TO BE SCRAPPED IN GERMAN YARDS.

Source: Reliable.

13 January, 1922.

There is submitted herewith a list of the obsolete war vessels, etc., of the British Navy which are to be cut up in the German yards. These are divided into five groups and beginning with December, 1921, are delivered every three months as indicated below.

FIRST GROUP—DECEMBER, 1921.

	Tons.		Tons.
10 destroyers	7,720	*Theseus*	3,642
Roxborough	9,500	*Nelson*	13,620
Liverpool	3,430		

SECOND GROUP—FEBRUARY, 1922.

	Tons.		Tons.
2 torpedoboat destroyers	3,040	*Implacable*	13,030
Essex	7,780	*Carnavon*	9,500
Fearless	2,647	*Forth*	3,367
2 destroyers	1,544		

THIRD GROUP—MAY, 1922.

	Tons.		Tons.
Cäsar	11,516	*Hercules*	16,600
Zearlandia	13,480		

FOURTH GROUP—AUGUST, 1922.

	Tons.		Tons.
Commonwealth	13,480	2 monitors	9,520
Bellerophon	15,705		

FIFTH GROUP—NOVEMBER, 1922.

	Tons.		Tons.
Hibernia	13,480	1 monitor	4,760

First-class towing facilities have been arranged for the towing of these war vessels or destroyers, namely, the towboat *Achilles* (1,000 horsepower), belonging to the Navy Department; the towboat *Seestern* (585 horsepower), belonging to the Cuxhaven Towing Co.; the towboat *Blumenfeld* (400 horsepower), belonging to Bernhard Blumenfeld. It is very probably that other vessels will be employed as towboats, namely, the towboat *Arbeit* (1,400 horsepower), belonging to the Navy Department, and the towboat *Kraft* (1,000 horsepower), also belonging to the Navy Department. The towboats of 1,000 horsepower are also to take the necessary crews along to England and to bring the vessels back from there.

The *Seestern* and *Blumenfeld* will tow the destroyers (570 tons) and also the torpedo-boat destroyers. The harbors from which the vessels will be towed are Portsmouth, Chatham, and Davenport.

The first group will be taken to Wilhelmshaven and Warnemünde. A large part of the next groups will be taken to Wilhelmshaven and probably also to Bremen, Lübeck, etc.

The value per ton is estimated at about 46 shillings, or approximately 460,000 pounds sterling.

There are in all 8 line ships of a total tonnage of 110,905 tons; 4 large cruisers, 32,422 tons; 3 small cruisers, 9,444 tons; 2 torpedo-boat destroyers, 3,040 tons; 12 destroyers, 9,264 tons; and 3 monitors, 14,280 tons.

BRITISH TO CONTROL MESOPOTAMIA FROM THE AIR.

Source: Reliable.

The British Air Force establishment in Mesopotamia will be augmented by two squadrons—about 20 machines—of troop-carrying aircraft.

The Royal Air Force will become responsible for the maintenance of order in Mesopotamia in October next, and not on February 1, as stated.

British troops, with the exception of a few units for guard work, will then be removed from Mesopotamia, any troops that are needed being provided by King Feisul.

At present there are six squadrons of aircraft in the Mesopotamian area, which from February 1 is to be separated from the Middle East establishment, embracing Mesopotamia, Egypt, Palestine, and Aden. As has been already announced, the air force in the last-mentioned three areas will be under the command of Air Vice Marshal Sir E. L. Ellington. The name of Air Vice Marshal Sir John Salmond is mentioned in connection with the new command of Irak.

The idea of garrisoning Mesopotamia with an "aerial army" has been cherished for some time by Mr. Winston Churchill. It is

pointed out that the Mad Mullah's 1919 rebellion in Somaliland was put down in six weeks at a cost of about £30,000, instead of being allowed to drag on and thus cost millions. This "classical" instance has encouraged the belief that the maintenance of a Mesopotamian air defense will be an economical proposition. The saving of hardship to troops in forced marches across desert lands is another point urged in its favor.

It is stated that the new troop-carrying machines will each carry 10 men and their equipment and will be armed with 2 machine guns. The cost of each airplane is not likely to exceed £2,500.

The planes to be used in this campaign are of Vickers twin-engine type, known as the Vernon, which is the modification of the Vimy commercial plane, and will be powered with two Napier "Lions." The troop-carrying feature varies from the ordinary commercial plane in that instead of having individual seats for each person, two benches are built along the interior sides of the fuselage facing inboard, and the plane is designed to carry one squad complete, i. e., a corporal and eight men with full equipment, three days' rations, and ammunition, and, where necessary, a small mountain gun or portable machine gun.

FUTURE OF THE BRITISH EMPIRE.

Source: London Press.

The London "Public Opinion" sums up the future of the Empire with these three paragraphs:

Either the Empire will have played its part in the development of civilization, and have changed into and given place to a much larger union of free states, or it will have become a danger and a nuisance to mankind, and have followed German imperialism and Roman imperialism to the dustheap.—*H. G. Wells.*

The Empire could only be saved by an infusion into it of an adequate population of our own blood. There was room in the Empire for three or four hundred millions of the British race. Australia, for her own security, should welcome every drop of English blood we could send her.—*Sir Rider Haggard.*

One hundred years hence the population of the British Islands would be about fifty millions. The United States would probably contain a population of three hundred millions. Canada would probably have about sixty millions and Australia the same number, while New Zealand would have perhaps twenty or twenty-five millions. The United States would therefore have an enormous predominance in wealth, power, and security over all the other English-speaking peoples. These islands would have fallen from their pride of place, and would be only one among several dominions. They would be no longer the center of a world empire in which they had the dominating power.—*Dean Inge.*

HAULBOWLINE DOCKYARD.

Source: Reliable.

11 January, 1922.

The Haulbowline Dockyard at Queenstown, Ireland, is soon to be closed down, and after being stripped of all its machinery is to be handed over to the Government of the New Irish Free State. A large number of apprentices who are now at Haulbowline will leave there soon to complete their apprenticeship in England and Scotland naval dockyards.

ROSYTH NAVAL BASE.

Source: Reliable.

29 January, 1922.

On January 23, 1922, the following official notice was posted at the Rosyth naval base, Dunfermline district:

Orders have been received that the program of work and the numbers of men and staff borne at Rosyth are to be materially reduced. The numbers of men at Rosyth will be reduced to a maximum of about 2,600. These reductions will be made at the rate of 200 men per week, the first 200 to be discharged on February 11. The result of these reductions will be that it will be possible to accommodate in the vicinity of the yard all workmen retained, and, in consequence, the dockyard train service and inconvenience allowance will cease in due course.

(Sgd.) JOHN F. E. GREEN, *Admiral-Superintendent.*

It is stated at the naval yard at Rosyth that the main purport of this notice is that 3,000 men will be discharged from the naval base during the next three months. Dockyard train service and "inconvenience allowance" to Edinburgh and other places are to cease, thereby saving the British Admiralty and nation over $500,000 yearly on this account alone.

The number of men at the Rosyth Naval Yard will now be reduced to the maximum of about 2,600, it is said, the reduction to be made at the rate of 200 per week, the first 200 being discharged on February 11, 1922.

During the war Rosyth was rated as one of the largest and most important naval bases in the world, employing many thousand men, and oftentimes harboring the combined American and British battle fleets.

CLOSING OF CERTAIN AIR STATIONS IN GREAT BRITAIN.

Source: Reliable.

31 January, 1922.

The commander of the coastal area of the air ministry yesterday received instructions to reduce the number of stations in operation, and he stated that the stations to be closed would prob-

ably be Felixstowe and Cattwater. This is a direct result of the recommendations of the Geddes committee which, as has previously been reported, is a committee formed for the investigation of Government departments with a view to reducing Government expenditure.

BRITISH AIR MINISTRY TRIALS ON GASOLINE TANKS.

Source: Reliable.

31 January, 1922.

For the past two months the air ministry has been conducting trials on so-called flash-proof and fire-proof gasoline tanks for airplanes. These tests were conducted at the Royal Aircraft Establishment at South Farnborough, and the equipment consisted of a track about 80 feet in length and mounted at an angle of about 80°, on which operated a small truck. On this truck was mounted a dummy fuselage, in the nose of which was carried a dummy engine constructed along the general lines and weight of the Hispano-Suiza 180-horsepower engine and made of concrete; in the rear of this the tanks submitted for trial were suspended, under the same conditions that they were designed to mount in a real airplane. In the test for crash conditins this truck, with its equipment, was hauled to the top of the track and released and allowed under the various conditions, to crash on concrete, or firm earth or soft earth.

There were recently 26 entries, and this has now been reduced to 3, the one submitted by the Imber Anti-Fire Tank Co.; one designed by Commander Boothby, an ex-officer of the Royal Navy now interested in aviation matters generally, and in lighter-than-air work principally; and one submitted by the India Rubber and Gutta Percha Co. The air ministry has informed this office that the tanks representing these three companies are being rebuilt for the final trials which will take place within the month of February. No general reports or final findings have been made to date.

All of the above three tanks are designed on the rubber covered principle.

SITUATION IN CUBA.

Source: Reliable.

1 December, 1921.

I. The Military Situation.

The military situation shows no change. Col. Eugenio Silva, former commandant at Camp Columbia, is transferred to command troops in Pinar del Rio. It was rumored that he was removed for inaugurating disciplinary measures against certain officers, who had

misconducted themselves. A message is being prepared by Congressman Consuegra cutting Cuban armed forces to one regiment of artillery to man fortresses; one regiment of infantry, and six regiments of cavalry to serve as rural guards in Provinces, thus cutting the cost of the Army from $14,000,000 to $7,000,000 per annum. This will be put in the form of a bill before Congress. Strong opposition is expected.

Our own troops carried out drills and instructions as per schedule.

No change in supporting troops.

The future military situation presents the prospect, almost the certainty, of a drastic reduction of Army and Navy.

The Army force stationed in Camaguey has not been paid for two months.

There is much discontent accordingly, and talk has been made of an uprising to take the form of a coup to seize the Government. I have no definite information on this score. The military attaché at Havana does not credit the rumor.

II. Economic Situation.

There is no radical or definite change in the economic and industrial situation of Cuba, although there are some hopeful signs, which may indicate the dawn of prosperity.

No loan, neither $5,000,000 nor $50,000,000, has been obtained from American bankers. Congress maintains the budget at $65,000,000 and shows no tendency to decrease this amount, despite presidential messages, and indications from such civic bodies as the Havana Rotary Club, that it should be $50,000,000, even $40,000,000.

No plans have matured for the disposal of last year's surplus of sugar. In the meantime there will be a percentage of loss for deterioration, which will add to the difficulties of the owners in making a profit on any sales which may be authorized.

The Sugar Finance Commission, which is about to be dissolved, adopted a plan of shipping some amounts north to the refineries to be bought as needed, but in the main this commission is considered to have been a detriment to the sugar business, by keeping the owners from realizing for what they could get and so obtaining money to put into work of next season's crop.

Schemes to limit the new crop by Government decree or legislation, or concerted action by the producers, have all failed, the best judgment being that those who can should make all the sugar possible this season, taking whatever price the market affords. In the meantime no labor is being spared to convince the United States Congress that the 2-cent duty of the Fordney tariff bill is unfair to the Cuban Republic, created by the United States, and that the Platt amendment entitles Cuba to preferential treatment in commerce as well as in affairs of State.

Demonstrations against the Fordney law have already occurred, notably at Cienfuegas and Santiago de Cuba, which became mob scenes with no serious result, however.

At present the mayor of Havana and the entire city administration are under indictment for misappropriation of city funds. The secretary of public works is also being investigated.

If Cuba is really trying to have a clean political administration there is hope that the present Government may pull through.

Gen. Crowder, although severely criticised by the irresponsible press as usual, is still working and hopeful of a good result.

III. Political Situation.

Political activity has ceased to a certain extent, being merged in the now paramount issue of economics and finances. The opposing liberals or outs still continue their criticism and comments on the Zayas régime, and the rotary club of Cuba have filed schedules of what should be done by the Government. All the suggestions of the rotary club are good.

IV. Psychological Situation (Propaganda).

The Foster case (assault of American official of Cuba Railroad) was finished in the correctional court of Camaguey. The assailants were sentenced to 60 days in jail, which almost caused a riot in court. This was considered a light sentence by all but the parties concerned, who had used all possible influence, political and otherwise, to get free. The judge gave assurance that the sentence would be served strictly. The bringing of these people to justice has had a good moral effect, but has increased the ill feeling against the Americans among a certain class. The Cuba Railroad officials appear to be satisfied, and consider the incident closed. This case has resulted in a movement being made for the removal of the marines from Camaguey, on the ground that they are a menace to Cuban liberty and sovereignty.

This claim is made by politicians and grafters, not by those who wish for clean government. As before reported all American interests, and the better class Cubans, would consider the removal of the marines at this time a mistake, which could not be corrected later. Special reports covering these matters have been made to Gen. Crowder by the undersigned.

V. General Impressions for the Period.

That something should be done to aid the sugar industry.

That the Cuban Government should try to organize a program for the regeneration of Cuba, based on the suggestions of the rotary club, as follows:

1. Budget reduction to $50,000,000 or less.
2. Suppress unnecessary expenditures and graft.

3. Fiscalize Government finances.
4. Publish monthly statements of condition of treasury.
5. No pardons except by recommendation of convicting courts.
6. Lottery revenues (if it must be continued) to go to the Government instead of to individuals.
7. Continue efforts for concession for Cuban sugar and tobacco in Fordney law.
8. Tariff reform.
9. Commercial treaties—reciprocity.
10. Reduce railroad rates.
11. Reduce excessive dock charges now in existence.
12. Force efficient administration of sanitary and public works departments.

ALLEGED CONSPIRACY AGAINST THE PRESENT CUBAN GOVERNMENT.

Source: Reliable.

15 February, 1922.

In order to be on the side of safety we have sought information from radical sources where there exists a belief, or a pretension of belief, in the reality of the alleged plot. This has been supplemented by a careful consideration, from many angles, of the prevailing temperament of the public which might lend itself in any way to the consummation of a revolution, rebellion, coup d'état or other radical movement. Among these subjects of discontent we have carefully noted the following:

First. The general public discontent, in both economic and political circles, due to the present chaotic conditions and the alleged incompetency and graft among public officials.

Second. The disgust of disappointed political elements who failed to obtain their object in the recent political campaign, and who are so disgruntled that they would be delighted to see the overthrow of the present régime.

Third. Disgust on the part of certain groups who formerly had influence with the present régime, but who have been disappointed in obtaining the favors they have asked. Among these are those who are displeased with the present cabinet, and who have gone so far as to speak of impeachment proceedings against the Chief Executive if steps are not taken to correct, or to change the cabinet, and to eliminate the conditions of graft now said to exist in many departments.

Fourth. Keen resentment and disgust on the part of political groups in all parties at the recent enactment of the amendment to the Crowder Electoral Code.

Fifth. Great disgust among employees of all departments on account of the scandalous delay in payment of the salaries of the lower employees, while high employees and those of political influence have generally been able to collect their salaries promptly.

Sixth. Discontent in the army, due to the following reasons:

(*a*) Disappointment and disgust entertained by certain army officers who were used in influencing the last election, and who expected a great reward therefor, but who have not received the favors expected.

(*b*) Discontent among both officers and enlisted men because of the delay in giving them their pay. A large part of the army has not been paid for the months of November and December.

(*c*) Discontent among certain officers who have always refrained from political activities, and who feel that officers less deserving and less competent than themselves have been promoted over them on account of political influence.

(*d*) Discontent and apprehension among officers and enlisted men on account of the intended reduction in the pay and strength of the army which is proposed to be brought about in the near future.

Seventh. Keen discontent among the labor organizations and repeated threats of labor leaders to cause trouble on account of the elimination of walking delegates, and the proposed reduction in salaries of employees of public service corporations, etc.

Eighth. Great desire on the part of a certain element who would like very much to see intervention, and think that a coup d'état or other radical action is about the only way intervention could be brought about.

Ninth. Disgust among the Veterans' Association at their inability to collect their pensions promptly, and their disgust at what they term great immorality now existing in governmental and financial circles.

From the foregoing considerations it will be seen that the Cuban public mind, unless restrained by other more weighty influences, is now in such a state as to afford a fertile field for originating and fomenting plots of rebellion, revolution, and so forth.

On the other hand, there are known to influence the public more weighty facts than those enumerated above. The lessons of the revolution of 1917 have not been forgotten. The American note wherein the United States made it clear that it would never recognize any Cuban Government founded on force, revolution, and so forth, is thoroughly understood by the general public. In fact, political partisans have frequently complained that the American Government was the only obstacle which prevented an uprising and a forcible resistance against the electoral tyranny which was alleged to have been practiced against them by the party in power.

We are therefore compelled to admit that a coup d'etat, revolution, or like movement would ultimately end in failure, and that such an attempt would only be made by persons of little judgment and of dangerous character.

Therefore we are required to study the character of the persons alleged to have been parties to the plot. The following individuals have been mentioned in the wild rumors which have been afloat concerning the conspiracy:

Gen. Loynaz Castillo.
Gen. Emillio Nunez.
Senator Rosendo Collazo.
Senator Aurelio Alvarez.
Dr. Ricardo Dolz.
Col. Julio Sanguily (commanding officer, Camp Columbia).
Col. Eugenio Silva (commanding officer, Pinar del Rio).
Col. Amiel (commanding officer, Matanzas).
Maj. Briggs (commanding officer, Cabanas).
Maj. Cordoves, aide to the President.

According to rumor, the plot was to have been consummated as follows: Cordoves, the President's aide, to seize the President and turn him over to Maj. Briggs, who would hold him as a prisoner in Cabana Fortress. The other Army officers above-mentioned then to come in and give their assistance to the new régime which would place Gen. Carillo (the Vice President) in the President's chair.

A study of the personnel of the alleged conspirators shows a group of men joined together who have been extremely antagonistic in politics, who are extremely different in temperament, and several of whom are known to be men of extremely conservative tendencies and good judgment, and always friends of law and order.

The *political personnel* of the alleged conspiracy may be divided into two groups:

First. Those whose minds and public records show them to be of conservative and peaceable temperaments, and whose judgment and political sagacity are above question.

Second. Those of restless nature but who have great political insight and political aspirations, and who would not attempt any such radical action unless there was a very great probability of success in such a "coup."

The *military* men mentioned may be classified into two groups:

First. Those of excellent character, good judgment, splendid records, and well-known loyalty.

Second. Those of a restless or radical temperament who might be capable of taking radical steps, but whose past history shows that their radical activities have been on the side of the man in power,

and that they have a tendency always to assist the party who is in power and who is supposed to have a stronger force behind him.

With one or two exceptions, the entire personnel above mentioned are not only educated men, but men of keen political insight who have had great experience, and it is reasonable to suppose that they would not lend themselves to any radical movement which did not give great promise of success.

The only possible way by which the rumored "coup" could prosper would be by carefully planned assistance of the military forces of the republic, and of these military forces it would be absolutely necessary to have the active and secret assistance from the troops stationed in the vicinity of Havana. It would be absurd to count on the success of any such movement without the aid of the military.

The loyalty of the Cuban Army is still unquestioned, in spite of the discontent said to prevail therein at present. Neither the chief of staff of the Cuban Army nor the district commander whose troops are now guarding the palace believe that any military persons whatever could have been parties to such a plot.

It may be asked why rumors have been so persistent and so general if no such plot existed.

From a careful study of propaganda of different kinds, it would be easily seen that certain restless political agitators might make capital out of such rumors. In fact we have been talking to men who appear to want to believe these rumors and who would like the public to believe same.

Among the motives which might be ascribed for the circulation of such propaganda, the following may be mentioned:

First. A certain element desiring intervention would like such rumors to reach the United States and to cause there the belief that such chaotic conditions exist on the island of Cuba as to demand intervention.

Second. It is a well known fact that many disgusted politicians of different parties have been using all possible means to influence the President in regard to cabinet officials and other matters in connection with the present administration, and it is stated that they have even gone so far as to threaten impeachment proceedings in the Senate. The rumor of a conspiracy would naturally make the Chief Executive apprehensive, and this element may hope to influence him into yielding to their wishes by instilling fear through such rumors.

Third. Several of the most prominent men mentioned among the alleged conspirators are known to have presidential aspirations, and one of them recently announced his candidacy for that office. It can be easily seen how the bitter enemies of those popular and influential men could endanger their chances for success by connecting their

names with such an outrage and thereby prejudice law-abiding citizens against them. It is thought that this is one of the very strong motives of the propaganda circulating these rumors.

Fourth. Most of the army officers mentioned are very popular, but they are known to have some enemies who would no doubt welcome the spread of rumors connecting their (officer's) names with such disloyal action.

Only the most far-fetched hearsay and expressions of opinion are all that we have been able to obtain. We have found no one who is willing to make a statement on his own responsibility or who is willing to say that he knows that any particular persons have been connected with the conspiracy.

CONCLUSIONS.

The alleged conspiracy is founded on rumor connected with reckless talk and café gossip known to be so abundant in Habana. Such a movement could not possibly be successful without military support, and military support to such a "coup" can not be reconciled with the present loyalty existing in the Cuban Army. Even if such a movement were to have the military support of the Cuban Army, its ultimate and quick downfall would be assured on account of the stand taken by the United States Government.

The propaganda in connection with this affair is evidently political in origin, having for its object injury to certain influential political candidates, and intimidation of the Chief Executive, and the discrediting of the republic in the eyes of the United States Government.

THE FAR EASTERN QUESTION.

Source: Reliable.

27 December, 1921.

(NOTE.—This office does not agree with some of the following statements, but nevertheless they are the ideas of men of sound judgment and knowledge of Far Eastern affairs, whose opinions can not be entirely disregarded.)

Senator Lodge, in introducing the quadruple alliance to the United States Senate, is quoted as saying: "The surest way to prevent war is to remove the causes of war." No one can possibly confute the truth of this statement, but on the other hand those of us who live in the Far East and actually know its conditions are at a loss to see in what way the signing of this alliance has removed the causes of war or in what manner it is even an attempt to remove the causes of war.

Reuter's News Agency is authority for the statement that Lord Grey in his speech at Manchester said that the real difficulty in the Far East at present was the question of China, which had not been solved by the Washington conference, and the real danger was that while China remains in a state of chaos the countries interested in China might be drawn into interferences which might produce great difficulties between themselves, besides injuring China.

This statement of Lord Grey seems more to the point, and certainly echoes the opinions of those of us who follow the Far Eastern question from an actual close contact with the whole situation only to be attained by a residence of some years in the Far East.

It can be safely said that it is axiomatic in the world's history that any large and economically rich country which continues to remain in a disordered state ultimately drags those countries into conflict which have valuable interests in that country.

Looking back on the history of the Far East one is struck with the fact that a weak Korea was the primary cause of both the Sino-Japanese War and also the Russo-Japanese War; it was the attempt of the Chinese in the first case and the Russians in the second case to promote their interest in Korea that caused Japan to declare war in both cases. A somewhat parallel case exists to-day in the chaotic condition of China. If Japan is to remain a first-rate power she must control the coal, iron, and food of China, and this means a domination of China and which immediately conflicts with both American and British interests in China.

If America and the British Empire are willing to sacrifice their trade interests in China to a Japanese absorption of Chinese resources, then all causes of war in the Far East are removed till the day arrives when Japan by virtue of her increased power feels she is in a position to wage a successful war on either America or England.

The extent to which Japan can be depended to live up to the terms of any agreement or treaty can be best understood when one considers that in 1905 Japan concluded a treaty with Russia in which she solemnly pledged the autonomy of Korea, but five years later Japan completely ignored this treaty by annexing Korea outright.

The future effect of the quadruple alliance in the Pacific Ocean and on the Asiatic mainland can probably best be envisaged by looking back on the effects produced in this territory by the Anglo-Japanese alliance.

The Anglo-Japanese alliance, which was signed, as we well know, in 1902 by Great Britain and Japan, was an attempt on the part of these nations to protect themselves against the expanding imperialistic policies of Russia and Germany.

It is common knowledge to-day that the full details of the military part of the Anglo-Japanese alliance were never published and it

seems safe to assume that Great Britain had other secret understandings with Japan as to the interpretation of their pact.

For the last seven years Japan has openly and in defiance of the interest of all other nations violated China's sovereignty, corrupted her officials, and never hesitated to force China into signing away her natural wealth and territory.

During these years the United States with its weak Wilsonian Far Eastern policy stood silently by and allowed Japan to do exactly as she pleased; England also quietly allowed her ally to run affairs in the Far East with a high hand without objecting in any way.

Great Britain's acquiescence to Japanese actions in northern Asia can only be explained by what seems a correct assumption that England was perfectly willing to allow Japan to do exactly as she pleased in northern Asia, with the understanding, however, that Japan would fully respect Great Britain's sovereignty in her insular possessions and dominions in the Far East.

The results of the Anglo-Japanese alliance have been: First, to give Japan confidence in pursuing her mainland policy, because she felt that, although it might not meet with Great Britain's approval, certainly it would not meet with the latter's disapproval; second, it has created a rather bitter anti-British feeling in many districts of China; and third, it has fostered a feeling of suspicion in America that the continuation of this alliance was aimed directly at American interests.

Having analyzed the results of one alliance in the Far East, one does not hesitate to prophesy what may come out of the signing of the quadruple alliance.

Exactly why France was made a signatory to the alliance is beyond comprehension, for French prestige in the Far East is at a low ebb; the failure of the Banque Industrielle de China has brought French trade to a standstill. So far as Indo-China is concerned, her rights in this territory are well recognized by the Chinese, and also the latter well know that as a result of the World War, France is in no position to assume an aggressive policy toward China.

It would seem that France was brought into the alliance to insure the ratification of this treaty by the American Senate or, as a certain Chinese official has stated, "to make the company decent enough to allow America to join."

The quadruple alliance will undoubtedly cause a bitter feeling in all of Asia toward the nations who are signatories to this pact; it will undoubtedly create an anti-American feeling amongst the Chinese and the nationals of the Far Eastern Republic.

The Soviet Government of Moscow has already voiced its displeasure at the signing of this alliance and proposes convening a Pacific conference at Irkutsk, to which the Governments of Japan, China, Chita, and India have been invited to send delegates. There

is no doubt that these countries will be represented at Irkutsk, and it can be safely said that our ally, Japan, will, if not officially certainly unofficially, be represented.

The following statement by Mr. Agareff, foreign minister to the Far Eastern Republic, is of interest. (NOTE.—The Far Eastern Republic comprises to-day practically all of the old Russian Empire to the eastward and northward of Lake Baikal. Its claim to non-Bolshevik principles are farcical, for Chita is just as Bolshevik as Moscow; on the other hand, the Far Eastern Republic has come to stay, and in dealing with any Far Eastern question this fact must be clearly recognized.)

Looking back solely on the events of the last three years, the Far Eastern Republic can not take a hopeful view of the Washington conference's ability to solve those Far Eastern problems that effect the welfare of Siberia.

When allied intervention in Siberia was agreed upon, all parties to it guaranteed the integrity of Russian territory and pledged themselves to respect the sovereign rights of Russia and to withdraw their forces as soon as the purpose for which those forces were sent had been achieved.

These solemn declarations have not yet been made good. Foreign troops are still stationed on our territory, and entire districts are still under foreign occupation.

Since foreign troops entered our territory at the invitation of the Government of the United States, the people of the Russian Far East hold the United States no less responsible for the present state of affairs than the country whose troops still occupy parts of our territory.

The bitter experiences of the past naturally make us skeptical as to the results of the Washington conference in so far as they may affect the Far Eastern Republic. But, in addition to our warranted disappointment over the past, certain present facts justify our pessimistic attitude toward the conference at Washington. I refer to the recent developments in the Maritime Province.

At the very time when the powers represented at Washington are attempting to solve the problems of the Far East, Japan's militarists have become more active and aggressive in their Siberian policy. At this very moment the Merkuloff press is rejoicing over the activities of the White Guards in the Maritime Province.

And yet I could quote many statements, produce many facts to prove that even the Japanese representatives in Siberia admit that the so-called Morkuloff government has no support from any class of the Russian people. How, then, were the White Guard attacks made possible?

The White Guards are advancing along the Ussuri Railway into the territory of the Far Eastern Republic under a screen of Japanese troops, which occupy towns and villages and then turn them over to the reactionaries. This is made possible because the army of the Far Eastern Republic has been instructed to avoid all hostilities with the Japanese. Thus the Japanese have only to advance to make our men withdraw.

Thus the Japanese command's increasing aggressiveness makes our pessimism regarding the Washington conference greater.

It is true that one fact exists which contradicts our attitude of pessimism. I refer to the Chinese wireless report that our delegates will be admitted to the Washington conference.

If this report is confirmed the people of the Russian Far East will gain a more hopeful outlook. And the hope that at last our just claims may be satisfied and will inspire my people with the belief that America is able to approach Siberian problems from the viewpoint of justice and righteousness.

The quadruple alliance will undoubtedly throw China and the Far Eastern Republic into closer relations and facilitate the spread of Bolshevism in China. In this connection it may be of interest to note that the Bolshevists are running the Outer Mongolian Government and have practically absorbed the Korean independence movement by the spread of Bolshevik principles, and yet there are many who maintain that Bolshevism will never get a foothold in China.

In fact, the quadruple alliance may ultimately result in an alliance of such countries as China, Soviet Russia, Chita, India, and the Turkis of both Chinese and Russian Turkestans, and also a Germany which has come back to its own.

The great outstanding feature of the Washington conference to the student of Far Eastern affairs is that the main sources of friction and most probable causes of war in the Far East have not been settled, and apparently an additional source of irritation has been added in the shape of the newly formed alliance.

The naval disarmament which has given the British Empire and America a fleet of equal fighting value, and to Japan a fleet of three-fifths that value, hardly alters the situation in the Far East, for America and Japan will be just as able to fight each other to a finish with a reduced fleet as with a large fleet. The effect of this so-called naval disarmament will be to increase greatly the efficiency of the American, English and Japanese navies; where heretofore national resources were taxed to the utmost to produce fighting ships in quantities, now such taxation will be diminished and result in the building of a smaller number of fighting units more perfect in design, more efficiently manned, and undoubtedly equipped with more effective and deadly weapons of offense and defense.

The quadruple alliance makes good reading to the average American or Englishman at home who, not knowing the actual facts of the case, considers this pact as an achievement in eliminating the possibility of conflict in the Pacific realm, and what is even more vital to him, the alliance and disarmament will result in a reduction of his taxes.

Also the Republican Party in the United States and the present Coalition Party (Lloyd George-Balfour-Curzon) in England may be assured of their continuance in power. It is the opinion that conditions in the Far East, inside of a short period of time, will be far more strained than they were prior to the convening of the Washington conference on November 12, 1921.

Japan entertains no idea of "playing the game square" with her allies, and as long as she continues her mainland policy of imperialistic conquest the real causes of war still continue to exist in the Far East.

FOOCHOW, CHINA.

Source: Lieut. Commander R. H. Knight, Commanding U. S. S. "Whipple."

3 January, 1922.

1. In general I found no evidence of marked change in the political, military, and economic situation of Foochow in particular, and the surrounding parts of Fukien, from that obtaining at the time of the visit of the commander in chief in October. I except, of course, the local situation at Amoy. There is one point, however, in the report on Foochow dated March 1, 1921, forwarded to me from the flagship, which it appears desirable to correct or modify. The last sentence in the subhead describing Li Hon-Chi appears as follows: "Li can practically be eliminated from Chinese affairs except as a charming host and a man of the most courteous manners." In spite of the explanatory remarks preceding this sentence, it appears to me, and Mr. Hanson concurs, that such a statement is too sweeping and might be very misleading. Whatever the extent of his domination by the Japanese, and considering also the undoubted fact that he is not a man of strong character, he yet remains in command of a large body of well-trained and equipped troops, who give no appearance of discontent or disloyalty, and who, as far as I could find out, were paid with regularity. That he exercises complete control of Foochow itself and all of the surrounding country as far as Yen-Ping, there seems no reason to doubt. Beyond that, the best informed opinion I was able to obtain, would indicate that the extent of his domination depends largely upon the personality of the local military commanders. Some of these will really attempt to carry out instructions and will remit a proper share of the taxes and others will not. At Yen-Ping, in particular, it is rumored that Brig. Gen. Wang has shown signs of insubordination, particularly in regard to transmitting tax money to Li. It was reported some months ago that Brig. Gen. Yuow, who at that time commanded at Yen-Ping, was becoming too strong to suit Li, who thereupon promoted him out of his command, to the post of commander of the local guard at Foochow, which post he now holds, and where he is directly under the eye of the governor.

2. As regards the attitude of Li in the questions of difference between the North and South, he appears to have adopted a waiting and watching attitude, while professing adherence to Peking if forced to make a statement. It is apparent, however, that Fukien is largely Southern in its sympathies. Therefore, it is doubtful if

he would venture to support the North in any case; the reverse is more probable. But as he can not be considered as a man of high and patriotic ideals and as unselfish in his attitude toward China as a whole, the most probable conjecture as to his real policy is that he will endeavor to avoid active participation on either side, but if forced into the conflict, will try to enter with the probable winner. In this connection an American newspaper man, touring the Orient for the Philadelphia Public Ledger, obtained an interview recently with General Li and asked him directly what side he would take in case of war between the North and South. With unexpected frankness Li replied, "I will wait and see."

3. On Monday, October 31, I accompanied the consul to the official reception at the Japanese consulate general, given in celebration of the birthday of the Emperor. All the consular body attended, together with most of the important civilians, both Chinese and Europeans. The governor attended with a large military escort and was closely attended, even within the reception rooms, by several specially picked members of his bodyguard. During the whole of the hour or more of his visit, and for some time previous to his arrival, the long bridge across the river was cleared with troops and all traffic stopped. This measure caused great inconvenience to the people.

4. Practically everyone with whom I spoke in Foochow expressed great admiration for M. Hayashi, the Japanese consul general. He seems to have earned the respect of everyone by his efforts to smooth down the trouble caused locally by the unscrupulous elements among the many Japanese subjects in the city, and vicinity, mostly Formosan Chinese, and so to have gone far toward removing the bad impression left by his predecessor. Undoubtedly he controls his nationals with a firm hand, and has used his own police to shut down a number of Japanese brothals and disreputable resorts. He seem to me to have a genuine liking for Americans and to deplore the unreasoning misunderstandings which partly account for the ill feeling between Japan and the United States. M. Hayashi was at one time Japanese consul at Seattle.

5. Upon Tuesday, November 1, an official call was made upon Gen. Li, and upon Friday, November 4, the consul and I were entertained at luncheon by him in the West Public Gardens of the city.

6. Fukien is largely a backwater as far as the larger political, military, and economic affairs of China are concerned, and were it not for the ports of Foochow and Amoy, the Province would seem to possess very little importance in any respect. Much of the soil is unsuitable for cultivation; communications are poor and large sections of the interior are infested with brigands, who are often not much worse than the northern troops billeted about the country to

keep them in check. For these reasons the opportunities for any but local observations in connection with my mission were poor. As stated elsewhere the sympathies of the people, as a whole, are largely with the South, particularly in the southern parts of the Province. No evidence was learned of any political or military arrangements between Gov. Li and the South, although such may exist, but rumor has it that certain of the local commanders in outlying districts of the south and west are ready to cooperate with Canton if war starts.

7. During the first week in Foochow I was able to obtain very little information on the subject of the local Chinese attitude toward the Washington conference. The fact seemed to be that the conference held very little interest for the military and business men, or even for the students, in spite of its farreaching possibilities for China. Finally, certain prominent merchants and others, notably the superintendent of the lower middle school of the city, received a telegraphic request from Shanghai (apparently this brought the matter to a head) to form a local branch of the "Pacific Conference Association of China." This was done and a meeting was held at which quite an elaborate resolution was drawn up and given to the press. At the time of my departure further meetings of this body were in order, and a more widespread interest in the conference was becoming evident among the better classes of the Chinese.

8. I was able to obtain no new information as to the influence of the Japanese in and about Foochow. All the trustworthy facts seem to have been included in the report sent me from the flagship. That there are many thousand Japanese subjects in Foochow, and that the Formosan Chinese are, as a whole, a bad type of citizen, is certain. One of the latter, a very rich tea merchant, has, according to rumor, recently lent Gen. Li a large sum of money (stated to be $2,000,000), for what purpose and on what terms could not be learned.

9. Arrangements were made through the United States consul at Foochow to call upon Gov. Li Hon-Chi at 11 a. m. Tuesday, November 1. Accordingly Mr. Hanson and I arrived at the time specified and were received with the usual Chinese ceremonies on such occasions, including various halts while our cards were impressively passed on from one official to another. A company of infantry rendered military honors in the courtyard.

10. We were ushered into a small reception room in company with the brother-in-law of the governor, who spoke English, and after a short delay Gen. Li appeared. After the usual courtesies had been exchanged, the governor asked a number of questions about the ship, our previous movements, and the length of our stay. He seemed at a loss to account for our arrival so soon after the visit of the commander in chief. He appeared particularly interested in the fact

that the *Whipple* was a destroyer, and wanted to know how long it would take us to make Foochow from Manila at full speed. He asked whether we had any high-speed power boats in the Navy; whether they were capable of going out to sea; how many men they could carry; how far they could go, etc. When, in answer to certain of his questions, I mentioned sea sleds, he immediately asked for a detailed description and my opinion as to whether he could buy one from the United States. I replied that I did not believe the Government could dispose of one to any but commercial firms and private individuals at home. At this point Mr. Hanson mentioned a United States Army surplus supply catalogue he had lately received and offered to lend it to the governor, who accepted. Shortly afterwards the call was terminated, and in leaving the governor invited us to tiffin the following Friday in the West Public Gardens of the city.

11. The tiffin on Friday was a most ceremonious and lengthy affair and included an official inspection of the gardens on the part of the governor, this being the first occasion for a considerable time upon which he had shown himself outside of his yamen, except for closely guarded rides through the streets to make or return official calls, etc. It was the opinion of the consul that the governor chose the occasion to show an example of his public spirit to the people by thus displaying himself, although all the people in sight were kept in the offing by an ample cordon of troops. He was further of the opinion that the governor probably felt safer in having us along, in that there was less danger of an effort being made against his life with foreign officials, especially Americans, present.

12. This apprehension on the part of Li seems the more plausible when considered in connection with his numerous and detailed questions concerning sea sleds. It is difficult to imagine for what purpose he would want a high-speed seagoing craft of considerable capacity unless it was to serve as a means of escape if serious trouble threatened. As evidencing the sincerity of his interest in the matter, the governor communicated with Mr. Hanson several days after the receipt of the United States Army circular mentioned above, and asked if arrangements could be made for the purchase of four of the sea sleds listed, and also of four airplanes. In answer to a cable to Washington, the State Department replied that it would not sanction the sale of war material to China. This, of course, because of the well-known convention of the powers upon the subject.

13. I have to-day seen a copy of a report dated November 23, 1921, sent in to the State Department by the United States consul at Foochow, which gives some later details of the governor's personal fears. A digest of the report follows:

Some time before 5 p. m. November 14, 1921, one and one-half cases, about 200 pounds, of dynamite were stolen from the site of the new Fukien Christian University, on the left bank of the Min River, about 5 miles below Foochow. This dynamite was part of a lot of 2 tons stored at the site for blasting purposes in connection with the new construction work, and nearly a year of negotiation on the part of the consul had been necessary before the final arrangements for its importation had been consummated. It had been intended by the consul to have the dynamite stored at the Government Dock & Engineering Works, a Chinese Government concern, and to have allowed the construction engineer only such portions thereof as were from time to time needed.

While Mr. Hanson was away on leave, however, the shipment arrived and was placed under lock and key in a special building on the university site. A watchman was employed here, but was not specially detailed to guard the explosive.

The theft was apparently committed by two or more men, who cut through the wire netting which inclosed the storehouse, forced the lock, and probably escaped with their loot by means of a boat.

Although the loss of the dynamite was discovered on the 14th, no report of the fact was made to the United States consul until the 19th. The latter immediately reported the facts to the Chinese authorities, who were naturally much irritated at the carelessness of the Methodist Episcopal Mission in permitting the theft and their neglect to immediately report it.

The commissioner for foreign affairs stated to our consul that all the Chinese officials were convinced that the dynamite was stolen by students connected with the Southern Revolutionary Party. As yet no trace of the culprits or the dynamite had been discovered.

When the news reached Gov. Li he immediately canceled his engagement to formally open the annual Fukien Provincial Chinese students' track meet on November 21, and the luncheon party he was giving to the consular body at noon the same date in the athletic grounds, and retired behind the closed doors of his yamen. It is the opinion of the consul that Li will remain in seclusion until the dynamite is discovered. He has recently shown a tendency to come out into the open and mingle with the people.

Should the dynamite be used to attempt harm to the governor or any of the Chinese officials, a feeling of deep resentment toward all the foreign missions in Foochow, and in particular the Methodist Episcopal Mission, will almost certainly result.

14. My call upon the governor was returned by Brig. Gen. Yuow.

RELIGIONS OF CHINA.

Source: Reliable.

3 January, 1922.

Anyone desiring to obtain a good knowledge of Chinese characteristics and customs must at the outset make up his mind to give the subject of religions of China careful attention.

It is customary to consider that China proper has three religions—Confucianism, Taoism, and Buddhism. This statement, however, is not entirely correct. It is best to consider Buddhism as a religion, Confucianism as a moral code, and Taoism as philosophy; in fact, one often meets an educated Chinese who professes to be a Confucianist or Buddhist and also a Taoist. In addition to these religions, the inhabitants of Tibet and Mongolia are believers in Lamaism, which is best understood to be a Tibetan modification of Buddhism; also there are to be found about 20,000,000 Mohammedans in China, mostly inhabiting the provinces of Chinese Turkestan, Kansu, Shansi, and Yunnan.

During the fifteenth century quite a large and prosperous Jewish colony established itself in Kaifeng, the ancient capital of the Province of Honan, but this Hebraic settlement has long since passed away.

The missionaries have been working hard to spread Christianity throughout China, but the number of Chinese Christians is probably one-half of the numbers claimed by them. It is a strange fact that up to date no Mongol has ever been converted to Christianity.

CHINESE-JAPANESE COMPANY TO RECLAIM AND DEVELOP MANCHURIA AND MONGOLIA.

Source: Reliable.

20 January, 1922.

The formation of the Manchuria & Mongolia Real Estate Co. was proposed some time ago by the colonial bureau of the Japanese Government, but due to international political questions and the then financial difficulties, the proposal was abandoned.

Very recently, however, the formation of such a company has again been considered. The colonial bureau, the South Manchurian Railway, and the Oriental Colonization Co. contemplate the organization of the Oriental Industrial Co. The announced purpose of this company is to assist Japanese in improving the now unproductive lands of Manchuria, to augment the supply of provisions for Japan, and to furnish a means of livelihood to a great many Koreans who are without employment. The latter purpose may be interpreted as a means of giving idle hands something to do and

thereby decrease in some measure the active propaganda for independence.

It is announced that the promoters have obtained an understanding with the Chinese authorities, but there is no mention of a Chinese financial interest in the undertaking. The premier of Japan has approved the formation of such a company.

The original plans provided for the cultivation of rice in large areas in Manchuria, Mongolia, and the Maritime Province, but it is now announced that cultivation will be confined to northern Manchuria.

EDUCATION OF CHINESE.

Source: Reliable.

6 January, 1922.

The educational program of the republican régime brought in 1912 was indeed a start impregnated with highest hopes and has been ever since a foundation upon which all future changes or innovations of education are based. Unfortunately, however, the nine years of republican government have been a period of instability, chaos, and anarchy, during which all efforts that might have been devoted to constructive purposes were entirely dissipated in strife, maintenance, and expansion of class interests and political propaganda. Thus, education, like many other things that seem to be of no immediate importance to the interests of those who are in power, is relegated to the background. While the national as well as provisional revenue has been swallowed up by the pay of the superfluous soldiers and the high salaries of the no less superfluous politicians and officials, there remains but a very small portion of the revenue which could be earmarked as the expenditure on education. Certain Provinces, like Kiangsu and Chekiang, have to be thankful since their educational institutions could draw from the authorities regularly their quota of the educational expenditure to maintain the status quo, whereas other Provinces, such as Fukien and Hunan, were compelled to close their schools—for some time at least—because all the expenses had been necessarily cut down on account of a necessity under military conditions. In general, education in China for the last few years has suffered in the hands of the Government, and while the officials in their proclamations to the public may be grandiloquent in their enthusiasm for the development of education, they have on the whole done little that is true to their words. Although the schools to all appearance have endeavored to maintain their status quo, their efficiency has been very much decreased through the lack of better-trained teachers and improved equipment, which modern society greatly needs for the teaching of its younger members.

CHINESE GOVERNMENTAL ACTIVITIES.

Source: Reliable.

2–10 January, 1922.

Teachers Interview Premiers.

A deputation of eight teachers representing the teaching staffs of the eight government schools in Peking waited upon the premier and asked him what he proposed to do in regard to the educational expenses of the schools. The premier assured these representatives that he would hereafter see that no default occurred in the appropriation of the monthly $220,000 from the ministry of communications.

An Alleged Japanese Loan.

It is reported in Tientsin that the Japanese Eastern Development Co. is arranging with the new minister of finance a niter loan of $2,500,000. The terms are reported to be very unfavorable to China. The loan negotiations have not yet reached the signing stage.

Measures to Relieve Financial Stringency.

As a result of discussions with Minister Yeh Kung-cho and Minister Chang Hu, Premier Liang Shih-yi has decided upon the following measures for the immediate relief of the Government's financial situation: 1. To issue bonds to the value of $60,000,000 on the security of the salt surplus; 2. To issue the eleventh year bonds to the value of $100,000,000; 3. To issue $15,000,000 worth of debentures of the two railways; 4. To raise a short term loan of $5,000,000 from the domestic banking group. This sum will be used for tiding over the new year.

Help for the Poor.

The authorities have ordered the reduction of likin and the transportation tariffs by the various railways for the importation of rice, wheat, and other cereals to Peking. Further the ministry of interior has ordered a reduction of the interest of warm clothes and beddings by all the Chinese pawnshops so that the poorer portion of the natives, especially the Manchus, whose position has been reduced from bad to worse on account of the stoppage of their pension, are relieved by these timely reductions.

Chang Tso-Lin Will Keep Out of Kiangsi.

It is learned that Chang Tso-lin has finally agreed to give up his original design of sending troops to Kiangsi as reinforcements to check the proposed expedition of Sun Yat-sen. The military operations in the Yangtsze Valley are placed in the hands of Gens. Wu Pei-fu and Tsao Kun.

To Utilize Disbanded Troops.

It is the intention of the Government to utilize the services of disbanded soldiers for the improvement and building of the national highways throughout the country. The work will be placed entirely in the hands of civil officials and in the various districts the gentry would assume control. Two mandates have been issued ordering the provincial authorities to arrange for the construction of municipal works, and it is said that they constitute a preliminary step toward demobilization, whereby the disbanded troops may be employed.

More Superfluous Officials Discharged.

Although the minister of finance has discharged more than 400 superfluous officials from the ministry, another batch will be discharged soon. These unfortunates will be picked out from the assistants and copyists of the ministry whose pay range from $20 to $60 a month. Concerning those affected by the first reduction policy, Chang Hu has only been able to pay these officials one month's salary with the promise that the remaining two months will be paid before Chinese New Year.

Foreign Minister Sends in Resignation.

Dr. W. W. Yen, minister of foreign affairs, sent a letter of resignation to the Government. Dr. Yen says that he must resign at the close of the Washington conference and asks the Government to find a successor at once, since the conclusion of the disarmament conference is close at hand. Both the President and the premier consider Dr. Yen's work satisfactory and therefore returned his letter of resignation.

Citizens Oppose Mayor of Peking.

Peking citizens are asking for the dismissal of Sun Chia-chen, mayor of Peking and a protégé of Wang Chan-yuan, ex-Super Tuchun of Hupeh and Hunan. Petitions have been sent to the Government condemning his administration and demanding his immediate dismissal.

To Expedite Elections.

It was the aim of the Chin Cabinet to convocate Parliament in order to unify the country. Owing to various causes Chihli and Chekiang have failed to carry out their elections, thus leaving the question unsettled. The Parliamentarians of those Provinces which have carried out their elections have come to Peking and are busy interviewing the authorities to persuade them to summon the new Parliament at once. They have also approached Tsao Kun, asking him to expedite the elections in his Province, but Tsao replied that

he will have to discuss the matter with Wu Pei-fu before making any definite move.

Obata Urges Early Payment of Loans.

The Japanese Government has instructed Obata, Japanese minister in Peking, to urge the Chinese authorities to fix an early date for the payment of the interests and principal on the Nishihara loans of 1918. A note to this effect has been received by the Government from Obata.

Wu Pei-fu Failed to Congratulate Premier.

It is said that Gen. Chi of Kiangsu, Gen. Lu Yung-hsiang of Chekiang, and Gen. Wu Pei-fu have failed to send congratulations to the new premier and cabinet. Wu Pei-fu's telegram to the Government contained remarks intimating that too many of the cabinet members had been closely associated with Yuan Shihkai. The pardon granted the Anfu leaders has also aroused Wu.

Unification Scheme.

The Government is understood to be ready to discuss unification with the South on the following terms: 1. Dr. Sun to be responsible for all affairs in the Southwest, his powers being the same as those of vice president; 2. Gen. Chen Chiung-ming to be Tuchun of Kwangtung and concurrently inspector general of Kwangtung and Kwangsi; 3. Gen. Chen Ping-chun to be Tuchun of Kwangsi; 4. Gens. Chao Heng-ti and Liu Hsiang to remain at their respective posts; 5. Gen. Lu Yung-hsiang to remain as Tuchun of Chekiang and as inspector general of Chekiang and Fukien; 6. Gen. Chi Hsueh-yuan, of Kiangsu, to hold the concurrent post of inspector general of Kiangsu, Anhwi, and Kiangsi. All the other Tuchuns will be asked to remain at their respective posts.

Wu Pei-fu's Circular Telegram to the Provinces.

The telegram which has caused such a shake-up in the political situation was sent by Gen. Wu Pei-fu on the 4th instant, and is in the form of a circular telegram to the President, premier, etc., bitterly denouncing the present cabinet's action in regard to its policy on Shantung, the pardoning of the Anfuites, and its pro-Japanese proclivities.

Presents to War Lords.

Gens. Chang Tso-lin and Tsao Kun, in spite of their announcements that they would not extort money from the Central Government within six months, have obtained enormous sums from Peking during their visits.

FRENCH TURBO-CANNON.

Source: Reliable.

27 January, 1922.

Experiments will soon be made at Liege to check officially the results of a French invention due to a lieutenant of complement, Engineer Delamare-Maze.

The tests carried out October last have already been found to be interesting. The next experiments are to be officially recorded by the Belgian Government, which has purchased the Belgian license of this patent. The inventor confidently asserts that he can fire a 75-mm. gun at an initial velocity of 1,000 meters instead of 530 meters. The tests of a year ago only attained 850 meters. Moreover, Mr. Delamare-Maze affirms that he has produced a gun which fires without recoil, which will permit the construction of guns which, for an equal power, will weigh only a third as much as guns in present use.

FRENCH MEDITERRANEAN SQUADRON.

Source: Official.

20 January, 1922.

The Mediterranean Squadron will include the four battleships: *Bretagne*, flagship of C. in C. Vice Admiral Salaün; *France*, *Paris*, *Jean-Bart*.

The first of these vessels displaces 23,500 tons and carries ten 13½-inch guns.

The three others, each of the same type, 23,500 tons, carry twelve 12-inch guns.

These four battleships will have 80 per cent of war complement.

In addition the following battleships will be put in reserve under the command of Rear Admiral LeVavasseur: *Provence*, *Lorraine*.

Two destroyer flotillas and a group of several vessels forming the train are to be added to this force.

In addition on the 1st of April there will be added three cruisers (ex-German) renamed: *Metz*, *Strassbourg*, *Mulhouse*.

FRENCH COAST DISTRICTS.

Source: Official.

12 January, 1922.

The coasts of France and northern Africa are divided into four large coast districts which are placed in time of peace under the command of a vice admiral.

These four districts are: The Channel coast; the Atlantic coast; the south coast of France; the coast of northern Africa.

The vice admirals commanding these districts bear the title: Commander in chief of the maritime frontiers of the Channel: Commander in chief of the maritime frontiers of the Atlantic; Commander in chief of the maritime frontiers of the south of France; Commander in chief of the maritime frontiers of North Africa.

These large coast districts form part, in time of war, of the theaters of maritime operations, the high command of which is intrusted to vice admirals already in time of peace.

A FRENCH VIEW OF THE WASHINGTON CONFERENCE.

Source: "Journal des Debats."

26 January, 1922.

The following is a translation of an article by George Lechartier appearing in "Journal des Debats," 24 January, 1922.

1. The Washington conference is now near enough the end so that it is possible, if not yet to determine all of the results, at least to foresee its general outlines.

2. On America's side what were the objects to be attained? What was the method employed? These objects were naturally of two kinds: the one of home politics and the other of foreign politics, of even world-wide scope.

3. As for internal politics, it was a question for the Republican Party (now in power) to regain strength in American public opinion, and to show its real accomplishments after many promises badly or not at all kept. It was necessary to show public opinion a state of durable peace with the assurance of lowering of taxes. In foreign policy it was necessary to solve the problems of the Far East. Above all it was necessary definitely to eliminate the Anglo-Japanese alliance, which was a menace to American interests in peace and which might become fatal to the United States in case of a conflict with Japan.

4. We recognize at once that the method employed was essentially American and efficacious. It proceeded by bounds; it had recourse to theatricals which struck the imagination. It played on the emotions and conquered the crowd. Each step or bound was assured by an apparent result accomplished *in principle* or by agreement *of principle*, on the point in discussion. The problems, in succession, were studied in their general aspect behind closed doors and quickly. Each public session, very solemn, announced new and astonishing progress. This method had at first and at once, from the local (American) point of view, the best results. We saw then how the conference had become the center of world interest, and that it had given to the United States and to the Republican Party who instigated it a marvelous prestige and was declared a national success by the national press. The American opinion was at once the accomplice of the press. So true was this that whoever took up the opposition, presented an obstacle, or even offered a criticism of the American proposition, became at once an enemy to the peace of the world. However, to the extent that the conference became prolonged and that the real progress appeared less important when the debates of the committees or the subcommittees on the subject of submarines, then the subject

of the Far Eastern affairs, or opposition based on the formulas of convention and of courtesy, made a better showing, opinion (American public) was at first disturbed and then disappointed. It seems that to-day there is no further illusion. When the treaties concluded shall come up for discussion in the Senate disappointment can only increase.

5. Considering, then, only the internal politics, it is not to be denied that the American Government has not obtained from the conference all it was looking for. Are the results any better as to foreign policies?

6. On the question of the limitation of armaments, the naval program, which was as precise as it was Draconian, has recently become, at the instigation of England and in the heart of the committee and subcommittees, much more accommodating. For Mr. Hughes, there was no question (on the 12th of November) as to the destruction and scrapping of vessels judged to be superfluous. In the last text proposed by Lord Lee, it is granted that these vessels should be disposed of, but only as fighting vessels, and they may "be converted into merchant ships, into targets or pontoons for target practice." But we do not well see at first to what strange commerce a converted dreadnaught might serve, neither what cargo so valuable that they could transport it and yet compensate for the cost of the freight and fuel. One can readily see that vessels suddenly baptized as merchant vessels could in a day, or to-morrow, recover, with their artillery on shore, their former value as warships. However, the British maneuver was this time too clear. Mr. Hughes was made aware of this in time and to it he opposed his veto. England had, up to this time, maintained her point of view. It was a fine opportunity for our diplomacy to take revenge for the failure of the submarines and to throw back (on the English) responsibility for a failure of the conference. No such thing has been done. It was hardly possible that England expected that. The things are there. In the problems of the Pacific the conference had two objectives—to restore the territorial integrity of China and to put into force the doctrine of the open door. Has either one been attained?

7. As one of the first results of the agreed-upon limitation of armaments there will evidently be confided to Japan full power to solve the Chinese problem at her discretion. The scrapping of discarded dreadnaughts, if finally accomplished, naturally removes the last obstacle which the American and British Navies, acting in concert or separately, could still oppose to Japan's activity in China and Eastern Siberia. In fact Japan has no need of maritime forces to continue, under the title of police, her former activities in China and Siberia. The doctrine adopted of the open door will only make a pacific penetration, or police penetration, the more easy, since being immediately adjacent to this door it would be only natural that Japan hold the key. The resolutions, all of them up to this time benevolent, adopted or about to be adopted on the subject of Shantung, and of her conditional return to China, do not yet carry any radical change in the policy formerly followed.

8. In fact, by the accepted limitation of armaments, by this doctrine of the open door, and in spite of or because of terms more or less clear in the various treaties, Japan remains, with all the privileges which her geographical situation accords her, the arbiter of the situation in the Far East. If she chooses in all loyalty to renounce the policy she has obstinately followed in these last years, the conference in Washington will not have been called in vain. If, however, in the course of the next 10 years and in line with internal changes she decides that the present conditions are subject to revision, she will naturally find herself in a better position than any of her allies or associates to accom-

plish this revision promptly and by herself. It will no longer remain with these latter and after—

"that they will be engaged in communication among themselves in the most complete and frank manner, and in order to arrive at an understanding on the most efficient measures to be taken jointly or separately to take up the situation,"

following the terms of the treaty, that to rebuild as quickly as possible a powerful navy and to use it to an end where peace will hardly have a place.

9. Thus, and to recall the program first announced by the United States, the success of the conference from the American point of view appears to-day, to say the least of it, doubtful. It does not appear, however, that we can say the same for the other nations.

10. We have already shown what England gained at the conference. With the limitation of armaments she has to-day the certainty that America will not profit by the exceptional opportunity which had been offered her (America) to have the most powerful Navy in the world; but she herself will have all the time necessary in the course of the next 10 years to recover his economic and financial equilibrium and to follow this up with the best means of regaining her traditional naval hegemony. She has greatly aided in revealing the "militarism" of France, in a country and in a conference devoted to the reestablishment of a lasting peace; and she has rejected with indignation all that France desired for protection and defense of her coast in her own manner, and intimated that "France over all" was responsible for the failure either partial or total of the Conference and when that failure might turn the whole of America against the guilty one. By that and by all the amiabilities and flatteries which she has showered on them, by all the concessions that she has appeared to make to them, she is prepared to support the United States in all their efforts looking to restoration, at our expense, of the world and central Europe in their normal, economic conditions which means most favorable for the recovery of English commerce. Finally, and in exchange for the "sacrifice" generously consented to by her former and embarrassing treaty with Japan, she has acquired recognition by the United States (and we should not be fooled as to this) of their friendship. If Japan has gained something at the conference in Washington, it certainly does not appear that England has lost anything.

11. Of the American resentment, which has taken the place of "close friendship" of former times, we have already been able to see the effects. The McCormick resolution so positively directed against us and so quickly adopted by the Senate is but one notice of what will be demonstrated to us elsewhere and particularly at Genoa. This conference at Genoa shows from now on what must be the outcome of the policy and of the English plan long prepared and consolidated in Washington. To resume, and to look at the facts rather than consider our hopes and desires, it seems already that if the United States has gained nothing at Washington, England has gained all that France has lost. Alas! that is to say a lot!

POSSIBLE USE OF SUBMARINES.

Source: French Officer.

12 January, 1922.

A French officer of prominence gave expression to the thought that France may build submarines of large carrying capacity for

transporting troops, as from north Africa to the south coast of France in time of war.

This thought is laughed at by officers of the French Navy, but is made record of none the less.

In this connection it is recorded also that the transport service of France is under the French Navy.

FRANCO-AMERICAN RELATIONS.

Source: French Press.

11 February, 1922.

By way of setting forth in brief terms the present situation the following is gleaned from close study of the local press:

The French press, in fact, all French people with whom I have come in contact, are convinced that the British press are engaged in a very determined effort to discredit France and the French people with America and the American people.

This view is particularly emphasized in discussing the report by the London Morning Post that President Harding and Secretary of State Hughes had both refused to receive Ambassador Jusserand.

While the opinion further seems to be unanimous that this is British propaganda, it appears to me that, having labeled it as such, the French would have done well to give it less prominence. The fact that it has been given such widespread prominence would indicate the sensitiveness of the French both as to propaganda and their relations with the United States.

M. André Tardieu discusses at some length why America is less friendly disposed to France as formerly—this under nine headings.

I. Economic Causes.

Following the armistice, America thought to participate in our reconstruction, thus responding at once to their sentiments and to their interests. On November 9, 1918, I (Tardieu) persuaded the American Secretary of the Treasury to prepare a bill providing that credit be extended to France to cover purchases in America, but my colleague, M. Loucheur, did not support my views. All American business men who came to France during the six months following the armistice returned home saying "there is nothing to be done with the French." Thus the provision for further credit to us was withdrawn and these economic relations broken.

II. Political Causes.

Mr. Wilson had proposed to the Senate a treaty for military guaranty to France. In order to oppose him, his adversaries proposed his works as well as his person. M. Clemenceau was accused of having gotten Mr. Wilson into entangling alliances and France was accused of indiscreet means to gain the support of the United States. Many Republicans showed themselves hostile to France by reason of their hatred of Mr. Wilson.

III. Personal Causes.

Americans are not concerned with abstract facts; they attach themselves to men rather than ideas. As to the war, three men stand out in their minds—Joffre, Foche and Clemenceau. The fall of Clemenceau in 1920, as expressed by an American paper, lost for France a part of American sympathy and interest. The men who have been at the head of our offices for the past two years have not been known in America. Interest in us is therefore being relaxed.

IV. Financial Causes.

Americans are convinced that Europe has exploited them; this for them is a dogma not to be discussed. When in 1920 and 1921 our unofficial press stupidly presented the question of the annuling of debts, our adversaries in America took advantage of this, notably the Hearst papers.

V. Anglo-French Causes.

America's assistance will naturally be deferred until England and France can come to an agreement. A three-cornered arrangement between Paris, London, and Washington is the only possible form of union. Our failure to get along with the English has worked to our disadvantage since the spring of 1920. But when, at the conference at Washington, the French delegate, by some strange aberration, thought to play the United States against England, France lost out. It was not the fault of France, but France pays just the same.

VI. Naval Causes.

The Americans understood that France took her stand the day Mr. Hughes proposed the proportion 5–5–3 for the three navies American, British and Japanese, but at that time Mr. Briand said nothing. Ten days later, without rhyme or reason, we asked for 350,000 tons of capital ships—more than we have ever had and more than we can have. The following day we agreed to half that amount, not enhancing our reputation thereby.

VII. Military Causes.

In a speech too well known, Mr. Briand discussed at the conference, a subject not included in the order of the day. He justified our military expenses only on the risk of a German aggression, in which Americans do not believe. He failed to add that we need our army to force recognition of our credit—in a word to act as out solicitor. Every American will agree to that, but Mr. Briand failed to mention it.

VIII. German Causes.

In the United States there are 15,000,000 Americans of German origin, all having the German mental attitude. Many have retained contact with their families in Germany. In the absence of a clear and understandable French policy, German ideas have made their headway in America, just as, for the same reason, they d'd in England. To quote a single example: Mr. Lloyd-George's plan of economic reconstruction, which Messrs. Briand and Loucheur, in their innocence, accepted as being an English document, was prepared in 1920 by M. Felix Deutsch, an associate of M. Rathenau. This plan was circulated throughout America in pamphlets by Mr. Otto Kahn, a director in Kuhn, Loeb & Co. of New York, and brother-in-law of Mr. Deutsch. From this started the campaign for "Economic solidarity."

IX. Secondary Causes.

During the war in 1919, the so-called French propaganda became a matter of organizing banquets and distributing decorations. Our ambassador, M. Jusserand, protested in vain. Our moral authority gained nothing by this distribution of red ribbons to persons, including our worst enemies, some of whom I could name. I am not sure that I have mentioned all the causes for American disaffection, but I have named the principal ones.

To this we should add that distance magnifies misunderstanding. You will understand why it seemed so long a time for us to get over from America the 2,000,000 soldiers, the money, materials, and food for carrying on the war.

If we work better to-morrow this spirit of fraternity will be renewed, but there is no time to be lost.

Falsehood of the English Press.

THE GREAT OFFENSIVE.

Comrade Loewy, known as Maurice Lowe, has overreached himself in cabling to the Morning Post that Mr. Harding wishes to give a lesson to France and that he had twice refused to receive her ambassador; if he (Loewy) had considered the face of Mr. Harding, he would have understood that this affable, loyal, charming President was incapable of such discourtesy to anybody, and least of all to the doyen of the Diplomatic Service. Comrade Loewy overreached himself in his effort to be agreeable to his patron, Sir Auckland Geddes, British ambassador in Washington, whose frequent guest he is. Last April when M. Viviani was invited to dine at the British Embassy in Washington he found there only one British journalist invited, Mr. Maurice Lowe, correspondent of the Morning Post. Thus relations are close between the ambassador and the journalist, and it is not impossible to suppose that the small dispatch of Wednesday is due to their friendly collaboration.

Comrade Loewy overreached himself, but I believe we must thank this man, for he has given us an opportunity to take hold of this great offensive of falsehoods which is in hand to-day against France. * * *

> France would be excluded from the pact of the Pacific and President Harding would submit to the Senate a treaty including only America, England and Japan. Thus a British dispatch from Lowe to the Morning Post on the 1st of December. Falsehood.
>
> France wishes to reserve to herself the right to sink with submarines defenseless merchant ships, so the American consulting committee (including Mr. Gompers) on 20 December, claimed for submarines the right to stop merchant ships. English dispatch from Washington. Falsehood.
>
> France is ruining herself and ruining Europe with armaments, this when military expenses of England are more than double those of France. English campaign. Falsehood.
>
> France, militaristic, imperialistic, bellicose, keeps America from going to the conference at Genoa—this America refuses because Mr. Gompers does not want the bolsheviks recognized, because Hoover does not believe that anybody can trade with them, because Mr. Mellon does not think that anybody can reestablish their money matters. English dispatches from Washington. Falsehood.
>
> Finally, Mr. Harding and Mr. Hughes have voluntarily failed the French Embassy in refusing to see their ambassador. English dispatch from Washington. Falsehood.

The object? At any price to embroil France with America—to make one of them believe she has been insulted and to make the other one believe she has placed her affections in a nation of nervous and aggressive people. Above all, France must be isolated and reduced to calling for mercy. "Rather perish," said M. Delcasse, "than not to retain our independence." We will keep it and we will not perish.

Enemy Propaganda.

The attention of the powers has been fixed for some time on the recrudescence of a defamatory propaganda which seeks to show France in a false light in the eyes of the world. It is only necessary to cross our frontiers in order to estimate the damage which France alone would have to suffer by these organized falsehoods and systematic disparagement. Even if the authorities responsible for our situation in the world do not succeed in eliminating the evil and in pointing directly to the venomous source, it is well known from whence come these incentives which have determined a new offensive, directed this time against our moral forces. The methodical character of this propaganda and hypocrisy of its instigators are enough to indicate the origin. It is not necessary to go very far to discover the tenets and the objects of this kind of a plot with its accusations against loyal France.

Every means are employed to blacken our good name in the civilized world. At a time when so many people know how to read and when so few are able to judge of what they read, the public press serves to multiply the premeditated defamation cunningly contrived behind closed doors—like a poison distilled in a laboratory. How shall we resist a falsehood which is distributed in millions of copies? Hardly does such a falsehood leave the mouth of hate of the professional liar when it is at once sent broadcast over the earth by telephone, radio, and by every means of mental contagion with which modern industry is provided and by innumerable agents for the mystification of confused mentalities. A modern philosopher has recently published a treatise on the stupidity of crowds; nothing equals the instinct of gregarious credulity which yields to disordered movements, to absurd maledictions, or panics of human beings in the mass, when it is operated by evil leaders ready to profit by their sheeplike docility, and its natural taste for the least effort and its total inability for resistance. The same enormous folly is more readily practiced as it is imposed upon the empty minds which enjoy being filled. How doubt our "imperialism" when millions of eyes in distant cities all over the face of the globe have read this word presented in large letters, like a formula of excommunication presented on paper which passes from hand to hand to serve as food for daily conversation? How many poor people thus instructed by propaganda, in the front ranks of which are found the pacifists in

good faith crying that we are looking for war and that we dream of nothing but adventure and conquest, believe this! Our France, which has suffered, bled, and wept so much to save the world, and which seeks only to live in peace, in justice, and in respect of her rights, for the consolation of her mourning, for the rebuilding of her ruins and for the safe-guarding of her liberty necessary for the respect of universal freedom, our France is now summoned to appear before a tribunal of Pharisees which pretends to call her to account for her conduct and which asks of her—one does not know what—justification!

This scandal has been endured too long. It is necessary that the truth appear clearly to the people whose credulity has been thus exploited. Thank the Lord there are among them those with talents for serving a just cause, and who will know how to plead our cause with intelligence and gain it, to the confusion of our slanderers engaged in the cruise of enemy propaganda. It is a work to do, an urgent work, for which we will find without delay (if we wish to take the trouble) a high class of workers, all agreed to do with every good wish, the necessary efforts of the powers that be.

THE FRENCH DELEGATES.

Source: Andre Tardieu.

3 February, 1922.

(The following is quoted to show the feelings on the part of many critics of M. Briand, that he and his delegates were sent to the Washington conference without preparation and without any formulated plan of action.)

The conference at Washington has finished its work. It has approved the naval treaty, the agreement as to fortifications of the islands in the Pacific, it has registered the agreement of Japan to return Shantung to China, and England's return of Wei-hai-Wei.

These resolutions are far more exhaustive, the problem of the Pacific or that of disarmament—the occasions for the conference. There still remains several points, particularly as to China, which may become causes for war. However, what has been accomplished is of considerable value.

But there still remains the Senate of the United States and its action on these agreements (treaties). According to Mr. Frank H. Simonds Senate ratification is far from certain. And if ratification fails, all the agreements fall to the ground.

In France we naturally have an interest in the French point of view. Before the conference we had on our side the great majority of the American press. The reverse is true to-day.

The heavy jests of M. Briand, the capricious heat of M. Viviani, and the familiarities risked by M. Sarraut have, it is understood, shocked

a country where foreign relations count so much; but there is more yet.

It is our whole method of action or rather our absence of method which disappointed our best friends, who, during the war, had come to look upon France as working more efficiently.

On the 26th of October, on the eve of the departure of our delegates to Washington, I said to the Chamber, to their great surprise:

> I limit myself in a general way to pointing out, with regard to the conference in Washington, that, according to the declarations of the Government, it does not appear to me that it (the Government) has made technical or general preparation.
>
> If I insist on this point, it is because you, M. Briand, have asked a special vote of confidence.
>
> I regret to be unable to find in your speech any basis for this confidence and I fear that once more this distant enterprise appears to be a verbal enterprise rather than reflected action based upon facts and living realities.

We are obliged to recognize that the words quoted above were based on facts. One of our delegates upon his return from Washington said in the cloakroom of the Chamber: "We had not a paper! We arrived in the United States unprepared."

Thus we see the facts and they correspond.

In taking a steamer from Havre for America M. Briand pompously declared that he was going to America as a mediator. He and his collegues thought to play the Americans against the British.

From the very first meeting it appeared that nobody sought the mediation of M. Briand. It was very evident that an agreement between the two great Allies of the war had already been established without us.

When Mr. Hughes's opening address showed this to be the case M. Briand was discountanced and did not know how to present our maritime necessities.

Three days later we are admitted by the small door of a secondary agreement.

And then for this agreement nothing was ready. They made claim for 350,000 tons of large battleships. The astonishment was general, and, without explanation, 48 hours later, we said we would be satisfied with less than half that amount.

When the first lord of the British Admiralty held us responsible for an article by Commander Castex in an unofficial review our delegates, who without doubt had not read the article, denied responsibility. It was only after hearing from the Paris press that they learned that Commander Castex had not written in the sense attributed to him by Lord Lee.

When the Americans refused the entire suppression of submarines our delegates set to work in such a manner that to-day before the Anglo-Saxon world we bear the whole responsibility for this refusal.

Armies on land were not up for discussion: on the part of the American Government this was a marked favor as regards France.

But M. Briand would have the limelight and insisted on talking about our army. Thus a few hours later the whole American press was against us. M. Briand had talked of an aggression (German) in which Americans did not believe.

On the contrary, he forgot to mention that the army on the Rhine is to guaranty our security and the payments covered by the Treaty of Versailles. He failed to say a word as to this necessity—it is admitted by the whole United States—for retaining a means of cohesion as regards to Germany, our debtor.

Upon his return to France he boasted of having "pled" our cause. This was a new aberration since the conference at Washington was not a tribunal and we had not been called upon to account for our army.

Then when the question of open door in China was presented we realized with astonishment—and why?—that we were the only ones to take reservations.

To conclude, we now have the subject of M. Sarraut. Never was so much ground for concerted action so befogged. M. Sarraut took up the "pleading."

Thus three lawyers went to the United States to talk for France; and never has France been so misjudged.

CONDITIONS IN GERMAN NAVY.

Source: Reliable.

13 January, 1922.

It is stated that the fellowship and cooperation exising between the officers and the men in the army is much better than in the navy, and that they are adapting themselves to the new conditions and situations much more rapidly. As far as the political sympathies are concerned, it is considered that the tendency of the officer corps of the navy is very monarchistic or "to the right" and that although both officers and men are adapting themselves somewhat to the changes, there is still a considerable void existing which is causing the Navy Department considerable worry. It is also stated that this is laid to a large extent to the revolution in 1918.

There is also a new scheme under process of formation by which the officers (in about two years' time, and this of course for the new officer material) would either be drawn from the ranks, or an applicant belonging to a good family could be taken into the ranks for the period of one year, at the end of which time he would be allowed to take the examination for training as an officer. Should

he fail at this time to show desirable qualifications fitting him for such a post, he would then be allowed to leave the service without any further duty.

GERMANY'S CABLE SYSTEM.

Source: Reliable.

6 January, 1922.

Germany possessed, at the end of 1920, 100 State-owned cables with a total length of 3,225 kilometers, and 3 private cables with a length of 3,933 kilometers total length; making altogether 103 cables with a length of 7,158 kilometers.

During the year 1920 two cables were added to the German cable system, one between Germany and Sweden and the other between Germany proper and East Prussia. The latter has a length of 380 kilometers.

The actual importance of the present cable system, however, is much less than the figures indicated, inasmuch as not a single over-sea line is now in Germany's possession, and the present figures include a number of stumps of the former cable system, which are at present not able to be put in use, pending a decision of the Entente.

Until the outbreak of the war there were two cables from Emden via the Azores to New York. One of these cables was switched to Brest by the French during the war and is operated by a French cable concern between Brest and New York. The English took the other cable and are using it as a Government cable between Penzance (South West England) and Halifax.

Germany also owned a cable from Emden via Teneriffe and Monrovia to Pernambuco (Brazil). With the aid of this cable the French extended their lines and secured for themselves excellent connections with South America.

German over-sea telegraph service suffered immensely by these seizures. Both the American and German merchant is dependent on London unless he uses wireless. A conference met in New York on October the 8th to decide definitely on the partition of the cables taken from Germany by virtue of the treaty of Versailles.

NEW GERMAN COMMERCIAL FLAG.

Source: Reliable.

4 January, 1922.

In accordance with an order of the Federal President, April 11, 1921 (RGB. S. 483) the new regulations with regard to the German commercial flag will become effective on January 1, 1922.

The most important provisions of this order are as follows:

Par. 3. German commercial ships must show the commercial flag:

(*a*) On meeting a ship of the Federal Navy which is carrying the Federal war flag.

(*b*) On passing a German coastal fortification on which the Federal war flag is flying, providing that the ship in passing is not more than 3 miles away from the fortress.

(*c*) In running into a German harbor.

Par. 5. It shall be the duty of commanders of war vessels to enforce the regulations with regard to the flying of flags by merchant ships. They are therefore justified:

(*a*) In the case of paragraph 3 to force the ship to show the flag.

(*b*) They are justified in forcibly taking away such merchant flags as may be flown which do not correspond with the proper regulations, and such pennants as are similar to those flown by the Federal Navy.

(*c*) They are also justified in preventing the illegal flying of the merchant flag.

GERMAN POWDER.

Source: Stettbacher.

6 January, 1922.

General Properties of Powder with Little Smoke.

The nitro-glycerine powders on account of the oil contained in them are less porous than the trinitro-cellulose powders and therefore less hygroscopic; on the other hand they are more easily altered by water than are the completely gelatinized leaf powders which can even be cooked with water without any disastrous results. The specifically heavy powders which are sensitive to dampness are based on aceton-gelatine since aceton discharges highly nitrated cotton while ether-alcohol merely causes a swelling. The aceton powders for the most part burn very slowly—they are too "lazy"—and their explosive power has to be sharpened or intensified through the addition of nitro-glycerine. In too sharp a powder it is advisable to decrease to quantity of aceton added to the ether-alcohol in order to secure the right density of charge.

A special mode of increasing the initial velocity consists of a second gelatinizing of the outside of the powder grains which causes a hardening of the surface. As a result of this, the velocity increases tremendously without any increase of pressure in the gun since the explosion of powder with a hard surface takes place very slowly with the velocity increasing continually. (Progressive powder.)

Freely ignited, the gelatinized powders burn with a very lively flame; explosions do not occur even when coming into contact with lightning. They are much safer than the black powders, as an explosion is generally restricted to the particular part effected. However the deflagration detonates in larger quantities and with an increase of pressure. In this way on January 12, 1917, at the Dupont Powder Works at Haskell, N. J., 190,000 kilograms of smokeless powder which was stored in caves, exploded with the most disastrous results. The great factory was razed to the ground and the whole town completely destroyed. The detonation was heard in six States up to a distance of over 100 miles. The detonation temperature was on an average 10 per cent lower than in the case of the trinitro-cellulose gelatinized powders with aceton or acetic ether which detonate at 176° or 177°. It is nevertheless a remarkable fact that the gelatinizing reduces the chemical solidity in spite of the fact that the process itself is merely a physical alteration of the nitro-cellulose fibers. The reason for this has never been explained; we only know from experience that without the most careful choice of raw materials and the most scientific preparation, gelatinized powders disintegrate in a comparatively short period of time.

Such catastrophes often take place in the navy as the stored powder becomes warm and this results in the self-ignition and explosion of the entire ammunition. The destruction of the *Jena* on March 12, 1907, and the *Liberte* on September 25, 1911, are both due to this cause. At the time of the destruction of the *Liberte*, 204 men were killed, 136 seriously and 48 lightly wounded. The Japanese line ship *Makara* was the victim of the explosion of smokeless powder in 1906, the Brazilian line ship *Aquedaban* in 1907, the Japanese cruiser *Makushima* in 1908, and the Italian war vessel *Benedetto Brin* in 1915. Therefore the storage temperature should never under any circumstances exceed 40°; the powder rooms must be well ventilated and be situated as far as possible from the boiler and engine rooms. Yet the storage of the gelatinized powder in a cool place is necessary not only because of the dangers of explosion but also on account of the ballistics. For example, tests carried out with the DWM projectile with a 335 g powder charge give the following results:

Powder.	Muzzle velocity m/sec.	Maximum pressure, kg/scm.
In normal state	870	3,277
Warmed to 50° for 8 days	923	3,926
Further storage for 8 days without heating	898	3,563

The figures show that under the last two circumstances the powder is absolutely unusable.

Blows and friction, as well as the ignition of the explosion cap, can cause explosion or detonation. The detonating caps of the cartridges should therefore not exceed a given charge. The explosion results mainly in water vapor, carbonic acid, nitrogen, and carbonic oxide, but contains also methan and hydrogen. It is well to have a surplus of carbon products, that is, of unconsumed gases, because then the walls of the tube are less affected or burnt out.

The burning velocity of a powder is called "offensiveness." This expression corresponds to the "Brisanz" or explosive power of an explosive substance or agent. This "offensiveness" should not exceed a certain limit for otherwise the combustion will take place like a detonation and lay too great a strain on the gun. It is greater in the half-gelatinized and nongelatinized hunting powders than in the military powders, namely, the heavy-gun powders containing nitroglycerine. This can be estimated approximately in the Tranzl lead-block. The swelling with a 0.54-gram explosion cap should at the most be 10 per cent greater than that of a cube powder (2 mm. length) containing nitroglycerine. The widening is all the more marked the more inclined the powder is to detonate.

Testing the stability.—Periodic tests should be instituted in order to guard against self-ignition and do away with the further use of bad powder. Besides certain States dispense with a powder after a certain number of years.

The stability tests are of various kinds. According to Bergmann-Junk, 1 gram of powder at 132° in two hours time should not release more than 25 cc. nitric oxide (NO). Krupp heats to 135° for 8 hours, and requires that no explosion takes place, while Sy determines the loss in weight which occurs as the result of the daily heating of 4 grams of smokeless powder to 115° for 8 hours.

HIGH-POWERED PROPELLANTS.

Powder for long-range guns.—The highest velocity of 430 meters for an infantry projectile was reached with the old black powder. Then came the smokeless trinitrocellulose powder with 860 m/sec. (for the present S projectile). In spite of the fact that the energy of the propellant was only 215 calories—30 per cent of the energy of the black powder—the velocity of the projectile was doubled.

Comparison.

1 kg. powder.	Nitroglycerine powder with 40 per cent explosion oil.	Trinitro-cellulose powder.	Black powder.
Explosion heat, in calories	1,290	900	685
Gas volume, liters	840	830	285
Initial velocity m/sec	960	860	430

If we now pass from the trinitro-cellulose powders to the nitro-glycerine powders, an increase of energy of 390 calories, or 43 per cent over that of the trinitro-cellulose powder must more than double the velocity in so far as the increase in speed takes place in equal proportion. This would produce a speed of about 2,000 m/sec., which, of course, does not actually take place. For it must be remembered that the difference in the disintegration velocity and the increase in pressure between the two chemically related trinitro-cellulose and nitro-glycerine powders is appreciably less than between the chemically divergent black and trinitro-cellulose powders. Also the volume of gas generated by the trinitro-cellulose powder is much less than that of smokeless powder, while there is scarcely any difference between this and the nitro-glycerine. It can therefore be assumed that if the strongest nitro-glycerine powder is used in place of the leaf powder, that the velocity of the infantry projectile is increased several hundred meters over the first kilometer.

In the longest ship guns, up to the present time only 960 m/sec. has been attained, because the length of the bore estimated in calibers is not much more than one-half of that of a gun barrel, and accordingly there is less waste of the powder energy.

On principle, there are no difficulties in connection with increasing the energy of our strongest powders over the maximum figure of 1,300 calories. It is only necessary to increase the amount of nitro-glycerine over 40 per cent in order to obtain the ideal combustion ration in the formation of the explosive gelatine (92 per cent nitro-glycerine and 8 per cent gun cotton)—a ratio of 1,620 calories, which amounts to a 25 per cent increase in energy. The powder concentration presents the most unlooked-for obstacles, even from practical reasons alone. It can be easily seen that in proportion as the combustion energy increases and approaches that of the explosive gelatine, the explosive character of the powder comes more and more to the fore and finally assumes the properties of one of the strongest and most destructive of all explosives.

It is out of the question to use explosive gelatine (gelatinized nitroglycerine) as a propellant. It would burst the very best gun steel and the most thick walled of loading chambers. Such a powder

has far too great an explosive power. The suddenness of the gasification has to be reduced first of all—that is, the detonation of the explosive can be converted to a "progressive combustion" of the propellant agent. Up to the present time, this only seems possible through partially combustible substances which when added again reduce the energy. There were two unfortunate factors connected with the increasing of the powder energy and the one worked in opposition to the other in the very worst possible sense of the word.

On account of this any further development along this line for a long time seemed quite hopeless; the power of nitroglycerine powder was considered to have reached a dead point which existed similarly in the powders of 30 years ago but which was finally solved by trinitrocellulose powder (guncotton). In the year 1913 the headquarters for scientific-technical investigations and research, located at Neu-Babelsberg, presented an invention which appeared to give an entirely new turn to the problem of nitroglycerine powder, the presentation of hexanitro-ether $C_2(NO_2)_6$—a composite noncombustible nitro product with a large surplus of oxygen. The most remarkable quality of the substance was the fact that it had the same oxydizing effect as that of an oxygen-producing salt, but left absolutely no residue. It is impossible to explode hexanitro-ether by either blows or friction, but if it is mixed with combustible and explosive substances, a specially powerful propellant is obtained, the power of which is in proportion to the ratios. If it is added to the well known nitrocellulose or nitroglycerine powders, it increases their ballistic efficiencies very materially. As a very powerful gun powder, the DRP. 277594 may be mentioned. This is a mixture of 68 parts guncotton, 16 parts hexanitro-either, 9 parts trinitrotoluol, and 7 parts diathyldiphenylcarbamide.

While nitroglycerine and guncotton represent two of the most powerful explosive products, they can be made into a propellant agent through a special gelatinizing process—if the nitroglycerine is not more than 50 per cent of the mixture, the slow, heavy hexanitro-ether is considerably neutralized and can be transformed into a propellant powder which probably surpasses the explosive gelatine in energy.

The preparation of such powders does not differ materially from that of the nitroglycerine powders. According to the method described in the patent application, the components are first dampened and then gelatinized through heat, dried, and finally made into the desired form by the help of heated rollers or presses.

Such hexanitro mixtures can be made to suit all purposes and their velocity and combustion can be regulated to a most unsurpassed degree. It is very probable that this hexanitro product played a very significant rôle in the long-range gun used against Paris, and that

this propellant, with a comparatively slow disintegration, decreased the bore length (reports assumed it to be 30 meters) by many calibers, through the exceptionally high energy. It is possible that a great strain is laid, not only on the powder energy but also on the length of the tube, in order to attain such a velocity.

Outside of the above-described possibilities for increasing the speed of the projectile, there are also constructive methods of doing so—partly scientific and partly practical.

The first method consists of a special arrangement of the projectile so that during the flight itself it serves as "firing agent" for a smaller projectile. The principal projectile is fitted with a propellant charge that is released by a time fuse a short time after leaving the gun. Then the second charge whirls out of the first and the two velocities must unite if the projectile within the projectile has so little influence on the inertia of the "gun projectile" on account of the significant difference in weight, that the ricochet of the powder charge creates no alteration in its course and velocity.

If we take, for example, the case of a 30-cm. naval projectile of 1 m. length, and if we assume this to be fitted from bottom to point with a gunshot channel and use at least a 100-times lighter auxiliary projectile of about 300 to 400 grams weight, then if the muzzle velocity of the projectile amounts to 960 m/sec., the small projectile can easily attain a velocity of 1,700 meters per second. But at the present time we lack any ballistics for any such material speeds. From a purely technical point of view, such figures are entirely probable, even though it may be granted that no accuracy of aim can be claimed for the secondary projectile.

Another method of increasing the velocity of the projectile consists in a widening of the powder chamber so that a far larger charge can be used for a given projectile weight than formerly. The most favorable illustration up to the present is the Krupp 15-cm. cannon, in which the powder charge represents about 40 per cent of the weight of the shot. A ratio of 1:1 or 2:1 must naturally assure an entirely new velocity of projectile; this, however, will necessitate increasing the size of the powder charge from 3 to 7 times, which represents great constructive difficulties and throws the gun, especially the back part, all out of form and proportion. Nevertheless the long-range gun used against Paris incorporated many of these points.

GERMAN SHIPPING.

Source: Capt. L. Fenchel.

3 January, 1922.

The German shipping interests are to-day faced with the problem of rebuilding their merchant fleet, but under existing circumstances

it is absolutely out of the question to consider undertaking this to the extent of the prewar status on account of the tremendous cost of construction and labor, added to the decrease in the purchasing power of the mark and the extremely modest German economical demands as well as the greatly lamed condition of international commerce and the existing surplus of ships.

Even during the war, the Government recognized the right of the shipping companies to an indemnity for the ships lost. As an emergency measure, the law of 1917 was passed whereby a certain amount of the claims of the shipping companies was paid them in advance, which sum represented the peace value of the vessels lost with an additional 70 per cent to cover the added expense of construction and quick delivery of the new vessels. A commission under Government supervision was formed in Hamburg to regulate these advance payments. Then when the strikes, lack of raw material, increase in wages, etc., following in the wake of the November, 1918, revolution, threatened to bring everything to a standstill, the Government after long negotiations declared itself ready to pay a supplementary sum dating from October 31, 1918. The further events occurring at this time made it necessary to come to new agreements as to the increase to cover additional expenses and the indemnity resulting from the operation of the terms of the Peace Treaty. The negotiations took a very, very long time and the shipping companies were kept uncertain as to the amount which was actually coming to them. They therefore declared themselves ready, in view of the country's financial straits, to accept a lower sum, which would be used exclusively for the rebuilding of the merchant fleet under agreement to keep a strict account of the use to which such money was put.

In August, 1920, the Government made a proposal concerning the indemnity which was to be paid by the Government, which proposal was very dissatisfactory to the shipping companies. The plan proposed merely the peace price for ships which were not to be rebuilt; and for those ships which were to be replaced either through new constructions or through purchase in foreign countries, an additional sum representing up to 70 per cent of the difference between the cost of the new constructions and the peace purchasing price. But since the shipping companies had still to pay out extra sums in order to construct or purchase vessels, they demanded increased indemnities. Finally, after the Government realized that all previous arrangements and proposals were insufficient to meet the various demands, considering also the stipulations and regulations of the treaty of Versailles, a flat indemnity system was decided on, as the shipping companies were anxious to have a certain freedom of action in connection with their building plans and be freed from the so-called

Government building system; but, above all, they desired to strike some definite agreement or know on what ground they were standing. Therefore, in March, 1921, the shipping indemnity contract was passed in the Reichstag on the third reading. By this contract the Government had to pay a flat indemnity to the amount of 4.7 milliards (marks) in treasury notes. In return, the above-mentioned shipping commission had to agree to use the entire indemnity for the construction and purchase of ships, 90 per cent of which was to go to German shipyards, so that at least one-third of the total losses (that is, at least two and one-half million tons) would be replaced within five years dating from January 10, 1920. The sum to be paid by the Government amounted to 11.97 milliards—the 0.6 milliards paid in 1919, the 3.17 milliards already paid in 1920, a fund of 3.5 milliards in the possession of the shipping commission, and the 4.7 milliards given by the Reichstag. It was stipulated in the contract that at least 95 per cent of all German shipping companies agree to same; this condition was fulfilled. The shipping companies furthermore agreed to repay 2 milliards to the Government in the event that the cost of construction during the next five years had decreased to such an extent that 50 per cent and over of the prewar merchant fleet could be rebuilt with the 11.97 milliards.

This contract was a very good thing, viewed from a national and economic standpoint. Work was assured to the shipyards and the workmen for several years to come, and German seamen had the prospect of resuming their former occupations. However, this contract did not fulfill all the anticipations of the shipping companies. To repair a loss of 6,000,000 tons, estimating 4,500 marks per ton as cost of construction, 27 milliards were necessary, and this sum the Government could never supply on account of its difficult financial condition. If the expense of construction should decrease to such an extent during the next five years that 50 per cent and more in place of 33⅓ per cent of the former merchant fleet could be rebuilt with the above-mentioned 11.97 milliards (3.75 million tons), then the shipping companies had to repay 2 milliards, or one-sixth, of the indemnity sum to the Government. One point of the contract which was not exactly agreeable to the shipping companies was the fact that only 10 per cent of the indemnity could be used for the purchase of ships in foreign countries; to-day the German shipping interests have an exceptional opportunity of purchasing at a low figure a large number of ships from the surplus in England and America. England has been offering to sell former German ships to Germany, and a number of these, among them the *Cap Polonio*, have already been purchased by German companies. But the future standing and efficiency of the German merchant fleet can only be in a position to compete with the rest of the world when such fleet

consists mainly of new constructions fitted with modern inventions and appliances.

The total indemnity has been divided over the different years from 1921 to 1925. For the period from April 1, 1921 to March 31, 1922, there is a sum of 25 milliards at the disposition of the German shipyards, but inasmuch as it was impossible during the first months for the shipyards to estimate to what extent the entire building program would have to be cut down, between 60 per cent and 100 per cent of the entire year's sum was already used up. Therefore the shipping companies had to reduce construction so that the sum remaining would carry them through the year, and this threw many workmen out of work and in many instances brought the work in many yards to a complete standstill. The smaller shipping companies also had difficulties; they had lost a very large portion of their fleet and before this building agreement had been drawn up, had already laid the keels of a great many ships for which there was now no money to pay, but these troubles were eventually settled by negotiations between the larger and smaller companies.

It is very true that the smaller companies had lost a large number of their ships, but on the other hand they were in a much better situation than the larger companies, as they still had a portion of their vessels which represented a value of from 15 to 20 times that of the prewar value. They had also made a great deal of money with these ships both during and after the war, while the larger companies were not only at a complete standstill, but they also had to undertake enormous burdens and expenses.

ITALIAN PRESS COMMENT ON DISARMAMENT CONFERENCE.

Source: Italian Press.

31 December, 1921.

(14844.)

The Tempo of 20 December publishes the following cable from Washington entitled "America's responsibility."

To-day registers the total failure of the agreement for submarines and auxiliary ships, and all the powers present at the conference will build as they like. In practice, this means that the mad naval race has not come to an end; on the contrary, after the threatening situation verified between England and France, the competition will become greater than it was at first. Only instead of competing in great ships, the battle will be around the question of cruisers and submarines. It is indeed a pleasing prospect for the Mediterranean! The principal culprit for this very sad result is France, and the minor one, but perhaps the more blameworthy one, is America.

We say frankly that if America had wished it, France would have given way on this question, as she already gave way on the question of the great warships; but America has shown a tenderness for France which goes far beyond simple Francophilism, and which, in spite of all, ends by assuming the aspect of a calculated policy.

It is now impossible to doubt that, in caressing France, America intends to consider her as a possible element of naval equilibrium against Japan and England. This idea has poisoned the spirit of the conference and has rendered the discussion practically useless. The agreement for the great ships will be ratified, leaving the powers free to build all the auxiliary ships they believe necessary.

ANTI AMERICANISM IN ITALY.

Source: Italian Press.

9 January, 1922.

(The following article appeared in the Rome, Italy, Il Paese, under date 8–9 January, 1922. The paper is known as the official organ of ex-Premier Nitti, who has posed for some time as a friend of America. The article relates to the two anarchists, Sacco and Vanzetti, who were found guilty by the Massachusetts courts. It is to be noted that the Italian Nationalists and population take no sides in this, it being exclusively an International and socialistic demonstration.)

Demonstrations in favor of Sacco and Vanzetti are becoming more intense on account of the decision of the court to refuse a revision.

At Boston a committee of defense has been formed to save these two innocents from the electric chair, and already several thousand dollars have been collected.

The leaders of this movement are Carlo Tresca, Dr. Nucera Abernavoli, Giovannitti, Felicani and others, together with the two newspapers Il Proletario, of New York, and L'Agitatore, of Boston. In every State in the Union mass meetings of emigrants are being held. One cry only comes from the throats of all, "We want to save Sacco and Vanzetti from the electric chair."

The false witnesses are despised like the lowest class of criminals, and are always guarded by the police. The excitement shown by all workers, especially the Italians, proves that there is great interest in the fate of the two unfortunates.

This feeling of pity has spread to Europe, where it is especially noted in Spain, France, Germany, England, etc. In Italy the movement is very intense, and all the so-called anti-National parties are pro-Sacco and Vanzetti, while the most-Italian parties such as the Nationalists and Fascisti keep quiet, and thereby protect the American hangman, helping him to destroy two innocent victims.

A committee has been formed in Rome to direct the movement throughout Italy.

The speakers at the mass meeting to-day are Errico Malatesta, for the anarchists; Hon Nicola Bombacci, communist; Hon. Leone Mucci, for the socialists; Hon. Hiovanni Conti, for the republicans; Pietro Martini, Biagio Troya, Bochicchio.

For Monday the 9th a general meeting has been called to take steps to intensify this movement throughout Italy.

FIUME.

Source: Reliable.

13 December, 1921.

The situation in the city of Fiume at the present moment is tragic. The high handed occupation of Fiume by D'Annunzio would have been entirely piratical were it not that he had the secret backing of the military party in Italy and in effect the backing of the Italian Government, which is now known to all men because D'Annunzio is publicly honored by the Italian Government instead of being exiled from his country as a traitor. His looting of the government property of Fiume has been fairly complete and entirely discreditable. The Italian Government is said to have paid the city of Fiume 11,000,000 lire for the release of an Argentine ship which had been seized by the henchmen of D'Annunzio and which was divided up among them, except that when the provisional government took over the occupation of Fiume in February, 1921, under the treaty of Rapallo (which had been signed on November 12, 1920, between Italy and the Kingdom of Serbs, Croats and Slovenes) there was still a million and a half paper lire in the treasury. Dr. Brossich, who was the elected provisional president and who took over the Government after D'Annunzio left, appears to have been friendly to D'Annunzio and very pro-Italian and to have illegally sold, for inadequate sums of money, the concessions of the public utilities of the city of Fiume to Italians, such as the tobacco monopoly, street railways, electric lighting, harbor works, railroad terminals, telegraph and telephones. At the elections which were held in June, Mr. Zanella was elected president of the council and has taken over the difficult task of undoing the illegal acts of Dr. Grossich in disposing of the above named concessions.

There have been three things, however, which have paralyzed the government of Mr. Zanella: First, the treasury is absolutely empty and he is unable to pay his employees. Being unable to pay the employees he has not been able to clothe, arm and equip 600 Fiume gendarmes to replace the 600 Italian carabineri who still remain in control of Fiume; and (second) these Italian carabineri openly sustain, fraternize with and refuse to arrest 150 ex-Italian jailbirds, so-

called legionnaires of d'Annunzio, who have remained in the city of Fiume under Italian pay in some form for the purpose of terrorizing the city and preventing the government functioning, continually threatening Mr. Zanella—at least according to his claims. He had been unable to make a loan in any other country and he has at last been forced by necessity to accept from the Italian Government a loan of 250,000,000 paper lire for which he has been obliged to make disadvantageous concessions to the Italian Government with regard to the railroads. In the palace which he occupies (and which was occupied by d'Annunzio) he can only use the back entrance as the Italian carabineri claim that they can not give him protection if he comes in the front way, and, since he has returned from Rome on December 5, he tells me two attempts have been made to assassinate him. The Italian flag still flies over the palace as the Italian carabineri say that these hundred and fifty thugs will not permit the flag of the free city of Fiume to fly. The whole explanation of this extraordinary state of affairs is that the merchants of Trieste are said to be paying these thugs to kill the city of Fiume economically as a rival of Trieste. Everyone knows that the policy of the Italian military party, winked at by the government, has been and now is to destroy Fiume as a rival of Italian ports. The process has been open and shameless. In the vicious circle which paralyzes the government, Mr. Zanella says, he can not get rid of the hundred and fifty thugs without creating a gendarmerie of his own and he is completely in the hands of the Italian Government as to money matters.

Mr. Zanella was to have gone to Belgrade on Wednesday the 7th of December, but, owing to the cabinet crisis and the change of government in Belgrade, it is idle for him to go just yet. His purpose in visiting Belgrade is to endeavor to obtain a loan from the Yugoslavs so as not to be entirely in the hands of Italy.

To make the story of Italian duplicity complete there was a secret clause in the treaty of Rapallo whereby the Italians gave to Yugoslavia that portion of the harbor of Fiume which is known as Port Bario, which is a section of the harbor adjacent to Sushac (which is Yugoslav) and is fitted with every modern improvement for cargo handling. It is in fact the more modern and best part of the port of Fiume. It is needless to say that the Italians had no right to give away something that they did not own and which belonged only to Fiume, and the net result of it is, as intended, to create friction between Yugoslavia and the Government of Fiume, which very properly refuses to recognize the conditions imposed by a secret treaty. Meanwhile the Yugoslav Government, being disappointed in this, is trying to create a port at Buccari, a few miles below Fiume, thereby helping to kill Fiume as a port and thereby also contributing to the

Italian plot. It would be hard to imagine a worse mess than has been deliberately created in Fiume.

Yugoslavia's contribution to the economic downfall of Fiume is due in not letting the railroad run into Fiume—instead of through Fiume—and at present to export (principally lumber) from Buccari, a port 5 miles below Fiume. The secret clause in the treaty of Rapallo, which gave Port Bario to Yugoslavia, was made by Premier Giolitti and Mr. Trumbich, under the circumstances that the Italian premier did not dare to let the Italian Facoisti Party know that Italy had given up anything to Yugoslavia. In other words, Giolitti was not strong enough to make a treaty which would displease certain factions in Italy. The giving of Port Bario to Yugoslavia was, of course, very acceptable to the latter, but it seems to be a gross injustice to Fiume, since it divides the city's harbor into two parts under different control. At present one has to get a passport viséed to proceed from Fiume across a small creek 20 yards wide to visit Sushak. The Italians control the customs frontier between Istria and the free city of Fiume and Italian carabineri control the customs between Sushak and Fiume.

On the Sunday afternoon I was there there were many Italian officers and soldiers in both Fiume and Sushak on leave or sightseeing, thereby giving the impression from mere appearances that the whole place was Italian, particularly as the Italian flag still flies on the President's palace. The Italian Navy maintains a destroyer in Fiume as a station ship and manages to dominate the scenery as they tried to do in Spalato in 1919 but were not able to do because they were not permitted to do it.

Mr. Zanella is pro-Italian, how far he is a party to the Italian aspect of Fiume is difficult to determine. He was the deputy in the Austro-Hungarian Diet from Fiume for some years prior to the war but he was associated with d'Annunzio during the occupation and was not altogether unfriendly to him. While tarred with the Italian brush, I personally believe he is simply trying to rescue Fiume from economic ruin. It seems incredible that the sincerely interested citizens of Fiume can not get together and rid the town of the hundred and fifty thugs or raise money to back Mr. Zanella in his attempt to achieve the economic reorganization of the city. If Mr. Z. is really in imminent danger of assassination and can get money to start the government going, he told me that he could rid the town of the thugs and cancel the concessions illegally disposed of to the value of $50,000,000. As it is now, Fiume is a football between Italy and Yugoslavia—in connection with Port Bario—after having been a football of the Allies. It seems incredible that in this age and century such a state of affairs can exist, if all Mr. Z. says is true, and he is simply trying to rid the town of the thugs.

He is a man of good personality and I had an interview of over an hour with him. He claimed that if he could get things going financially he would get rid of the thugs and put the Italians on the run and reorganize the city. He talked like a man of purpose and courage. Of course he would like, of all things, to get a loan from the United States bankers. If the public utilities were not seriously compromised by the illegal acts of Dr. Grossich, there would be ample security with the public utilities for such a loan.

As a member of the naval committee of the Adriatic in 1919 and as former naval attaché in Austria-Hungary, I know Fiume well and am acquainted with its history. Although a Croatian port, it was held by Hungary and the governor was always a Hungarian. Their portraits in oil are all to be still seen in the palace at Fiume. The seven steamship lines which operated from there, all the harbor works, and all the capital invested was Hungarian or Croatian. The railroad drained a great hinterland, whose capital was largely invested in the railroad, in the port works, and steamship lines. Even the pact of London in 1915 recognized no right of Italy to this port by running the boundary a few miles south of it.

It was largely President Wilson's original insistence that refused to recognize the Italian claims to it and our State Department has steadily turned its face against Italian possession. The free city of Fiume is largely our baby, but at the present moment it is a foundling. Naturally the representatives of the State Department in this region have kept it informed of the situation, but I can not help feel that our Government should recognize the Government of Zanella and give him such moral support as our past political interest would seem to call for. However pro-Italian he may have been, I think he sees from the failure of the Italian policy in the Adriatic that Fiume is doomed unless he cuts loose from Italian intervention. The Italians have made a very bad mistake in taking Zara, as it can not exist without the support of the hinterland, and it is now perfectly dead commercially. None of the natives of the adjoining territory will sell them milk or raw materials or products of any kind and even Trieste, which was a large and flourishing commercial port, is practically dead because the hinterland is seeking an outlet through the Danube River and the north.

Fiume is the natural outlet for Croatia and Hungary, but the railroad was deliberately ruined by d'Annunzio and the government of the city is hamstrung by a species of banditry of the Machivellian type. The reason why public opinion all over the world is not aroused by it is because similar methods are being used in so many parts of the world that its moral sensibilities are getting callous. While it is the present policy of the United States to avoid European entanglements, there are two ports in the Mediterranean in which

we have been diplomatically associated with European powers and where we have splendid opportunities now to get free ports for all our commerce, and these are Tangier and Fiume—both beautifully located strategically. Fiume is nominally and should be really a free port. There are fine storehouses and excellent cargo handling facilities. Our merchants can store cargoes there free of duty for distribution over the whole of the Adriatic area. Italy is powerless to prevent our having this privilege. Similarly at Tangier we can actively favor neutralizing it and making it a free port, which Gibraltar is not. We went into both of these questions out of sentiment and disinterestedness. There is a good opportunity just now to profit entirely legitimately since disinterestedness is one of the most powerful weapons in the world, for it is the real doctrine of the open door. We should lose no time in waking up to our legitimate advantage while the rest of the world is grabbing with both hands and kicking and biting others over the spoils. We occupy an impregnable position if we possess the initiative to take advantage of it.

VICE ADMIRAL NIBLACK AT SPALATO, RAGUSA, AND CATTARO.

Source: Official.

22 December, 1921.

On arrival at Spalato the port was saluted with 21 guns, with the Yugoslav flag at the fore, which was returned by the shore battery. On account of the draft of the *Utah* she was not able to enter the harbor, but anchored outside the breakwater. A "bora" had been blowing for four days during our visit to Pola, and continued during our two days' visit to Spalato, bringing cold weather and some slight snow. The mayor of the city, the colonel commanding the troops, and Capt. Stankovic, of the Yugoslav Navy, came on board to welcome me, and it was arranged that I should land at 11 a. m. to call on the governor of Dalmatia, whose headquarters is at Spalato. I landed at 11 a. m., and was received by a guard of honor and band of Serbian troops, and by a large assembly of the population of the town, the town itself being decorated in my honor. I called on the governor at his office and he returned my visit at 11.30 a. m., aboard the *Utah*. In the evening a dinner was given in my honor at 8.30 p. m. at the Hotel Bellevue.

Calls were exchanged with the commanding officer of the Italian cruiser *Riboty*, which ship has been at Spalato for the past eight months. It was a general understanding that when we withdrew the *Olympia* from the Adriatic the Italians would withdraw their ship from Spalato, as its presence there has only been a cause of diplo-

matic friction and a continual source of irritation to the Yugoslavs, but as the Italians have not yet evacuated the third zone of Dalmatia, in accordance with the treaty of Rapallo, which they should have done on May 10, there is still a tense situation between the Yugoslavs and Italians. It was arranged that the Italian consul and the commanding officer of the *Riboty* should be invited to the dinner in my honor at the Hotel Bellevue.

The dinner was attended by the captain and officers of the *Utah* and by the officials and leading civilians of Spalato. Dr. Stevan Metlicic (governor of Dalmatia), Dr. Tartaglio (mayor of Spalato), and Capt. Stankovic (senior naval officer) delivered speeches of welcome, to which I replied, disclaiming that I had, in 1919, done anything more for Spalato and Yugoslavia than our Government would have done under similar circumstances for any other country, which was not quite as satisfactory to the Yugoslavs as it might have been, but the Italian officials were present and I knew any speech made would be given wide publicity. My speech was given publicity in all of the papers of Yugoslavia and also commented upon in the Italian press. As a matter of actual fact, 24 February, 1919, on board the flagship *Olympia*, while in command of the United States naval forces in the eastern Mediterranean, and while member of the naval committee of the Adriatic, designated by the committee to be responsible for the zone of Dalmatia, of which Spalato was the chief city, I prevented the Italian admiral from entering the harbor of Spalato until such time as all four admirals of the committee should enter at the same hour. The Italian landing party was paraded on the forecastle of the Italian cruiser *Nino Vixio* and the Italian admiral and his officers were equipped for landing as they approached the entrance to the harbor. The Italian admiral, Rear Admiral Rombo, came on board the *Olympia* to protest against my action, stating to me that he had orders from his Government to enter the harbor of Spalato. I, however, compelled him to anchor and await the arrival of the other admirals. At no time in the subsequent months that the allied naval forces were in the harbor of Spalato did I permit the Italian admiral to land armed sailors except when accompanied by armed French, British, and American sailors as allied forces to preserve order.

There was no doubt in anybody's mind that the Italian admiral had orders from Rome to take over Spalato as they subsequently took over Fiume. Since the day when the *Nino Vixio* entered the harbor of Spalato with the ships of the other admirals, the Italians have continuously maintained a station ship there and there have been frequent clashes between the Italian sailors and the native population resulting on one occasion in the death of the Italian captain

commanding the station ship. In the treaty of Rapallo, signed 12 November, 1920, between Italy and Yugoslavia, a secret clause was appended by the Italian prime minister giving Yugoslavia half of the port of Fiume, the free city of Fiume retaining the other part. This has resulted in a stalemate for the city of Fiume with the result that it is dead commercially. This has been the object of Italian diplomacy from the start and Yugoslavia is, by this secret arrangement, encouraged to assist in the process. Through the Italian policy in the eastern Adriatic, Trieste and Zara are unintentionally practically dying commercially, and Fiume intentionally, to the advantage of Venice, as in by-gone days. The treaty of London, in 1915, which gave the islands of Dalmatia to Italy, was itself a secret treaty and its provisions have been set aside by the allied powers. Yugoslavia has been itself a victim of broken treaties and secret understandings and under them has exercised a patience and a spirit of self-restraint which is only equalled by its military ability to expel the Italians at any time they may choose to go to war. It is a dangerous situation which can not fail to produce another war in the Adriatic, through the short-sighted policy of Italy of continuing to stir up the hatred of the Yugoslav people without really obtaining the economic advantages which they are so eagerly trying to grab. My speech may appear to have been a little vigorous and unusual but it has been received with the greatest enthusiasm in all parts of Yugoslavia. In the comments of the press attention was called to the fact that the United States was the first to recognize Yugoslavia and that the visit of the *Utah* was the first occasion that a flag officer of the allied or associated powers had visited their country and saluted their flag. I say all this in the light of the astonishing welcome which was accorded me at Spalato, Ragusa, and Cattaro, and the elaborate preparations which were made for the entertainment of myself, the officers and crews of the *Utah* and *McFarland*.

On the early morning of December 15 a rabbit hunt or drive was given at Spalato for the benefit of our officers. An excursion was given to the interesting old town of Trau. I gave a luncheon to 22 people on board the *Utah*, at which the Italian consul and the commanding officer of the Italian cruiser *Riboty* were also guests. An excursion was given to the ancient Roman ruins of Salona, and a concert was given in my honor at the local opera house. On all occasions of my appearing in public I was cheered. It is a notable fact that during all of the months that we have had ships at Spalato there has never been an occasion when an enlisted man has gotten into any trouble. The population is enthusiastically fond of Americans.

The *Utah* and *McFarland* left Spalato at 5 a. m., December 16, and proceeded through the channel amongst the islands to Gravosa, the seaport of the town of Ragusa, where we arrived at 3.30 p. m. Here an elaborate program was carried out in honor of our visit. Calls were made upon the ship by the subprefect, mayor, and colonel commanding the troops, and at 7 p. m. a dinner was given in my honor and in honor of the officers of the *Utah* at the officers' mess in Ragusa. The following morning, December 17, being the birthday of King Alexander, ships were full dressed, and, accompanied by my staff, I attended the services in the Roman Catholic Cathedral and in the Serbian Orthodox (Greek) Church, and subsequently returned the calls of the officials who had called upon me the previous day. In the afternoon I visited Ragusa, where special preparations had been made for my reception.

In the evening we attended a reception given in the officers' mess. On Sunday, December 18, I gave an official luncheon to various Yugoslav officials, to which the French and Italian consuls were invited. Prior to the luncheon I received a telegram stating that King Alexander had conferred upon me the decoration of the "White Eagle, first class," and that the distinguished Gen. Pavlovic was proceeding by automobile to Gravosa to bestow it upon me. This is the highest honor that has been given in Serbia to any foreigner. In the afternoon the ship was thrown open to the public and I gave a reception to the leading citizens and their families. In the evening, a concert was given at the opera house in my honor. During the afternoon I received many telegrams of congratulation from friends in Yugoslavia, and in all comments of the press and speeches which have since appeared, this honor has been ascribed as a recognition of the great compliment paid to Yugoslavia by the visit of the *Utah* and of the general opinion that my action in 1919 had much to do with saving Dalmatia from Italian dominance.

The friendliness and enthusiasm of the population of Ragusa was only equaled by that of our subsequent visit to Cattaro, for which port the *Utah* sailed at 5 a. m. December 19. I remained behind on the destroyer *McFarland* to receive Gen. Pavlovic, but got a telegram from him at 9 a. m., saying that he would come to Cattaro, for which port I immediately left. Elaborate ceremonies of welcome were extended to our officers and men at Cattaro, where the streets were decorated and a parade held. This exceeded in elaborateness and warmth the receptions even at Spalato and Ragusa. National salutes were exchanged on the arrival of the *Utah* at Theodo and my flag was saluted by the senior Yugoslav naval officer present, Commodore Grund. Calls were exchanged and a luncheon was given in my honor at the naval station at 2 p. m. Commodore Grund returned my call at 4 p. m. and shortly afterwards the *McFarland*

sailed for Naples. In the evening a reception was given in honor of myself and officers at the Officers' Casino at Theodo. On December 20 at 7 a. m. the *Utah* proceeded to Castelnovo, in the Bay of Cattaro, where at 9 a. m. Gen. Pavlovic, accompanied by the commanding officer of the troops and the senior naval officer in Cattaro, came on board and, in the name of the King, presented me the decoration of the "White Eagle, first class." These guests were shown around the ship and accorded all the usual honors. The diploma accompanying the decoration was forwarded to the State Department through the American minister at Belgrade. Under the circumstances no other action could be taken concerning the acceptance of this decoration, as, at the time of the notice of its being awarded, it was on its way from Belgrade. The Yugoslav naval officers at Cattaro were extremely cordial and friendly and all look to the United States as being the best friend that Yugoslavia has. This sentiment is due, in some measure, also to the number of Yugoslav people who have emigrated from time to time to the United States and some of whom have recently returned with lots of money, the exchange being very favorable and their enthusiasm for Americans correspondingly great. I have gained the impression that the Yugoslav Navy is anxious to get the privilege of having some of its officers serve in the ships of our Navy for instructional purposes.

The general effect of the visit of the *Utah* to Yugoslavia has been excellent, and unquestionably they are more friendly to us than to any other country. It is very noticeable that the inhabitants of the provinces of Yugoslavia, other than Serbia, are now much more friendly to Serbia itself than they were in the first days of the union, and have come to recognize that the Serb people are really the dominant race in the combination. Unquestionably, also, as Yugoslavia becomes economically stronger the people will become more unified.

Of the 10,000 Russian refugees which were brought to Cattaro last year from Constantinople, only about 2,500 remain actually near the naval headquarters and in the town of Cattaro; the rest have been absorbed into the interior. It was noted that there are a large number of Russian refugees in Ragusa, and I saw an impressive funeral of a Russian general on December 17. As they all speak the Slav language and have the same religion, the problem of the absorption of the Russian refugees is only a question of time. It is understood that these Russians are being fed with money which the Serbian Government formerly owed to the old Government of Russia, and they consider that they are thereby canceling the debt.

It must be a source of great satisfaction to every American to feel that we have the entire good will of the people on the eastern shore of the Adriatic, and that they are warmly attached to the United States Navy and to the American people.

I believe that it will be a great calamity to have Fiume killed commercially, as it offers an opportunity for us to establish our commerce through its being a free port. In case it fails as a free city it would be to our interest to have the port internationalized in order to give us a strategical port commercially in this region of the country. We have gotten very little out of the war and have asked for very little, but we are at least entitled to get more than merely the good will of the people of this region. We have an opportunity through our former diplomatic relations in Tangier and Fiume to aid in establishing two free ports at strategic points without mixing ourselves definitely with European entanglements. It is merely taking advantage of what we have done in the past without any obligation to the future. It would be of value to know how the State Department stands in the matters of the future status of Tangier and Fiume.

Press Comments.

IMPORTANT ARRIVAL OF THE AMERICAN ADMIRAL IN SPLIT.

This morning arrived here, on the big American dreadnought, Admiral Niblack, who in the critical moments of the allied occupation, played a prominent rôle and sent to Paris objective information, and so saved Split from Italian occupation. His visit is even more important because America is the first nation to make to Yugoslavia the ceremonies of international courtesy.

In coming, the dreadnought saluted with gunfire, the Yugoslav flag at the mainmast. At 11 o'clock, Admiral Niblack accompanied by the commandant of our coastal zone, the commandant of the place, and three of his high officers, in special full dress, came ashore.

The military band played the American hymn. Greeted by stormy cheers, the admiral passed survey of the guard of honor. Greeting in our language, "Pomoz Bog, junaci." He called directly on the royal governor, Dr. Medlicic, and then went back on board the ship, greeted by cheers. The whole town was dressed with Yugoslav flags.

To-day will be an official dinner, and to-morrow a performance in the theater. All newspapers greet with hearty articles the admiral, the great friend of our State and people.

SPEECH MADE BY THE MAYOR OF SPALATO, DR. G. TARTAGLIN, AT A DINNER GIVEN AT THE HOTEL BELLÉVUE, SPALATO, IN HONOR OF VICE ADMIRAL A. P. NIBLACK, UNITED STATES NAVY, DECEMBER 14, 1921.

Allow me, Admiral, to express the gratitude, joy, and satisfaction of the town of Split and its citizens for the honor which you, Admiral, have bestowed on us by this visit.

Split is identified with you, Admiral, through your visit here in the first days of its deliverance and by the warm recollections, which, through you, Admiral, bind it with the greatest gratitude to the great people whom you, Admiral, represent.

Admiral, in those gloomy and hard times, you, with great tact, a broad mind, unbending purpose, a high conception of freedom, and an immense love for truth and justice, fulfilled the delicate task that had been intrusted to you in

the Adriatic, and particularly at Split, by always acting according to the exalted principles which your country had already maintained during the war and which accorded with the national sentiments and will of the population of this town.

Split, by your particular intervention, was granted the first enjoyment of the blessings of freedom so soon after the break up of the Austro-Hungarian Monarchy and was enabled to dedicate itself to the work of reconstruction, progress and development. It owes you, Admiral, a great debt of gratitude and will never forget what you, Admiral, have done for it.

I propose the toast on behalf of the town of Split and its citizens to you, Admiral, who have in such a dignified, human and righteous way secured to us the full advantages of the virtues and ideals of the great American people here also at Split.

Speech Made by the Governor of Dalmatia, Dr. Stevan Metlicic, at Dinner at Hotel Bellevue, Spalato, in Honor of Vice Admiral A. P. Niblack, United States Navy, December 14, 1921.

My soul, Admiral, is dominated by an immense wave of gratitude and esteem on thinking of the activity you, Admiral, had displayed here at Split in the year 1919, in your capacity of commander of United States naval forces.

It was at that time that the history of this region, this dear native country of ours, was then in the making. It was the commencement of our liberty. You, Admiral, sweetened those first life breaths of ours with a broad sense of truth and justice, a sincere and unselfish friendship, and your personal, goodly and noble bearing.

It was through you, Admiral, that we had got into immedate and free touch with the broad world, and it was you again who instilled in the souls of us, who had just come to life, the sound sentiments of confidence, justice, and national existence.

You, Admiral, have distinguished yourself and have done your country honor.

An now, with your visit, you have again thought of bestowing on us a great honor and confirming to us your old friendship.

In return for that we here, in our fully acquired freedom, present our fervid sentiments of love and gratitude—we, the sons of the people of Serbs, Croats, and Slovenes, to you, the representative of the Great American Republic—and unanimously shout, "Long live Admiral Niblack!"

Speech Delivered by Vice Admiral A. P. Niblack, United States Navy, at Hotel Bellevue, at Dinner on Evening of December 14, 1921, Given by the Officials and Citizens of Spalato, Dalmatia, in His Honor.

I thank very much the royal governor of Dalmatia, Capt. Stankovic, and the mayor of Spalato for their words of welcome and for what they have said as to my part in the incidents at Spalato in the year 1919. It is quite natural that you should all feel that I have in a special way assisted your Government in establishing itself, but I wish to insist that I have merely carried out the policy of our Government in this region as it has been carried out in all other parts of the world on all occasions.

We have asked no compensation from any country as a result of the war and our part in the reconstruction of Europe is entirely disinterested. We have made many friends in Europe in the past through the establishment of colleges, in relief work, and in keeping up communications by means of our

ships. In Russia the American Relief Association is feeding over a million children, but it took us many months to convince the Soviet Government and the Russian people that we had no ulterior designs or motives in doing so. The peoples of Europe are not used to the idea of something for nothing, of disinterested service, and of helping people who are suffering through no fault of their own.

On the other hand, the United States has very little interest in people who suffer through their own fault, who make secret treaties, who try to take advantage of every political situation to get something for themselves, and who try to exploit the people of other countries commercially for their own advantage. The United States Government stands for the open door—which means no special advantage for any one country; the freedom of the seas; the right of people to choose their own government; and in opposition to secret treaties in which the people of a country are placed in danger of war without their knowing it. In the conference which is now going on in Washington the United States is seeking, among other things, to preserve the integrity of China so that it will not be divided up as Africa has been. The United States believes that no territory is worth having which is not held by the free will of the people of the territory. For instance, we stand ready to give independence to the Philippine Islands when it is safe for them and the rest of the world to do so. We have acquired most of our territory by purchase, as we know from experience that it is foolish to make love with bayonets, as no territory held by military control is anything but a dead loss in the end.

While it is true that honesty is the best policy, it is *more* than the best policy, because real disinterestedness is the best policy, as more comes to you by not seeking than by trying to grab. I say all this merely to defend myself against the friendly accusation that I did more for this country than I would have done, or my Government would have done, for any other. However, I have many warm personal friends here and I admire very much the spirit and traditions of your people. I regret, however, to see that three years after the armistice there are still many questions to be settled in the Adriatic. Here in Spalato, of course, you are anxious to become a great commercial port. Personally, I think it would be a great thing for the world if Venice, Trieste, Fiume, Spalato, and Gravosa were all equally great ports. And I will tell you why, for it is almost a secret. In the great city of New York they had electric street car lines but they could not handle the traffic, so they wanted to build overhead elevated railways. The street railways thought this would ruin them, but they found they did just as much business as before. Then they built the underground railway, and the street railways and elevated railways did just as much business as before. In the same way, if Venice and Trieste and Fiume and Spalato and Gravosa were all in competition with each other there would be just as much business for each one, because business makes business and competition is the life of business. When anybody is afraid of competition there is something wrong; when countries seek special spheres of influences in other territories there is something wrong; when diplomatic business is done in secret there is generally something wrong.

In America we like to play the game with all the cards above the table, and when we find that there are cards under the table we naturally refuse to play. America is suspicious of coming into European settlements because there are usually many secret understandings and many secret treaties between countries, and she fears to waste her time in making settlements on the table which may be torn up by agreements passed under the table. There is nothing especially virtuous about the United States, and what is often criticized as idealism is

merely a love of fair play. They merely like to see the smaller underdog in a fight get the chance to which it is entitled.

It is a great pleasure for me to visit this part of the world once more and to meet good and true friends. I hope that our flag may be seen constantly in the Adriatic, and that in the resumption of commercial life all animosities will disappear. Most of the quarrels now over commercial questions are largely due to there not being any commerce anywhere. The next time I come to the Adriatic I hope to find everything in flourishing financial condition and good relations really resumed between all the peoples.

I thank you very much for this reception.

SUBMARINE MOTORS FOR JAPAN.

Source: Reliable.

24 January, 1922.

Two Sulzer 2-cycle submarine type, 4,000-horsepower 8-cylinder Diesel motors are being built at the present time by Sulzer Bros. for the Japanese Navy.

I obtained this information after visiting the Sulzer works at Winterthur and talking with several of their engineers there and later at Paris. By putting together various facts one after the other from the information elicited from and questions asked these gentlemen, I confirmed the above information.

On December 15 last I visited the plant of Sulzer Bros. at Winterthur and spent several days there. I went through the section devoted to the assembling and testing of Diesel motors a number of times. There were several large machines both of the marine and stationary type on test at that time, but I did not see any motors of the large submarine type.

The chief engineer of the marine department took me around the first day and one of his assistants the other days. I asked the chief engineer to what size they were building Diesels of the submarine type. I told him that I had heard they were working on one of 6,000 horsepower. He told me that this was not so; that a 4,000-horsepower motor was the largest one so far.

On my return to Paris, in talking with the head of one of the departments in the Sulzer branch there, I asked him what the dimensions of that 4,000-horsepower submarine type motor were; he gave me a number of them but could not tell me all that I asked.

He told me, however, that two of these 4,000-horsepower 8-cylinder motors were being installed on the Japanese submarine.

Data in regard to this motor.

Number of cylinders	8.
Diameter of cylinders	550 m/m.
Stroke	550 m/m.
R. P. M	375.
Weight per H. P. auxiliaries included	30.
Fuel consumption per B. H. P. hour	200 grammes.

Fuel injection pressure	60 kgs. full speed; 35 kgs. reduced speed.
Cooling water pump	Independently driven by electric motor.
Scavenging	Turbo-blower independently driven by electric motor.

REDUCTION GEARS IN JAPANESE NAVY.

Source: Reliable.

9 January, 1922.

Nearly all naval vessels, with turbine installations, built during the past four or five years have been equipped with reduction gears. For the most part these installations have been the Parsons single reduction, rigid frame, type. No naval vessel is equipped with a double reduction or floating frame type of gear.

It is believed that either the *Nagato* or *Mutsu* has Westinghouse gear, single reduction type, purchased in America.

The right to manufacture the Westinghouse double reduction type in Japan has been purchased, but so far as known none of these gears have yet been made.

The *Hakone Maru* (*Nippon Yusen Kaisha*), built at Mitsubishi (Nagasaki yard), has Parsons double reduction rigid frame gears. Three sister ships will be similarly equipped. These are the only Japanese vessels so far as known with double reduction gears.

The Mitsubishi Shipyard at Nagasaki is equipped to cut a gear 14 or 16 feet in diameter. This is said to be the largest gear-cutting machine in Japan.

Kure, Yokosuka, and Sasebo Navy Yards and Mitsubishi and Kawasaki Shipyards are all equipped to manufacture reduction gears. Other shipyards building naval vessels are supplied gears manufactured at one of the navy yards.

Very little gear trouble seems to have been encountered, and what has arisen has been confined principally to Kawasaki-made gears. This trouble has been due to soft metal, and consequent grinding of teeth, not to careless or inefficient workmanship.

Japan can be considered independent of outside assistance in the manufacture of all gears required for naval purposes.

SOCIAL CONDITIONS IN JAPAN.

Source: Far East Magazine.

24 December, 1921.

The year 1921 has been a year of a great ferment politically, industrially, and socially. A startling incident, known as a "Certain serious affair at court," affected politics considerably. In connec-

tion therewith there was, it was said, intrigue and conspiracy among clans and cliques, which caused general unrest. Meanwhile, groundless rumors created popular uneasiness, because the true state of affairs was not published.

In Parliament the insincere attitude of the political parties, both ministerial and opposition, toward the universal suffrage issue disillusioned the nonenfranchised mass and converted many of them into political indifferents and others into believers in "direct action." The peers made much stir about a rather unimportant question affecting school status, to the neglect of other questions of really national importance. On account of this attitude of the peers Parliament obviously lost power and prestige.

The extraordinary powers of leadership of the late premier, the overwhelming majority of the Ministerial Party, the weak and unreal opposition, the waning influence of militarists and bureaucrats, did not stabilize the political situation. But the American invitation to an arms conference came to the Hara Government as a deus ex machina. Mr. Hara made a clever choice in the personnel of the delegation to the conference. But just on the eve of the opening of the conference the premier fell at the hands of a demented youth. His cabinet thereupon resigned en bloc. In view, however, of the imminence of the conference the Seiyukai Government was given a new lease on life, with Viscount Takahashi at its head.

An imperial regency was instituted soon after, on account of the Emperor's protracted illness. At the Washington conference the much discussed naval ratio, it was thought, was forced upon Japan, and the four powers agreement, which practically abrogates the Anglo-Japanese alliance, was concluded.

It was generally expected that the labor movement would experience a setback when the war boom had passed, but bad trade and depression in industry have not cast a shadow over the aspirations of labor. Troubles of unprecedented magnitude and duration have cropped out more often than in the previous year. Most of them ended to the disadvantage of the workers, as strikes in a falling market should. The quarrel in the Ashio copper mine in April ended in a big strike. From May to August a strike wave passed over the industrial districts in western Japan. In the autumn, the same wave affected the dockyard workers around Tokyo. Quarrels between employer and employed were no longer concerned only with wage disputes but developed into demands for a share in the actual management. Labor now aspired to the "Workers' control of industry." The strikes were characterized by demands for collective bargaining and works' committees. The inauguaration of the latter in dockyards and factories in Osaka and Kobe was a concession to labor, a victory gained as a result of its insistence in the strikes. But the new

institution naturally is not conducive to industrial peace. It tends, on the contrary, to aggravate industrial relations. According to latest reports, employers are demanding drastic reform of the joint works' council in the Sumitomo Works.

New currents in radical ideas are spreading throughout the country. The workers now read, and are liable to fall victims to the newest social theories. Labor can not but be sophisticated. Once being sophisticated, it becomes unreasonable—hence labor unrest.

Of the events that signify social ferment there is no end. A crime epidemic spread through the country. Crimes of violence were almost of daily occurrence—usually mere acts of brutality, without vestige of romance. Among others, the Hill murder case remains fresh in the memory. But lethal weapons seemed by preference directed against persons in high positions. Prior to the assassination of the late premier, a ronin murdered Yasuda Zeenjiro, banking magnate. A gang of misguided young men were arrested some weeks ago on the charge of plotting against the life of the new premier. Just before or after this event Baron Sumitomo, of Osaka, was alarmed by a bombshell placed on the premises of his estate, which he formally donated to the municipality immediately after the incident. Baron Sumitomo's action is not a solitary example. It is now fashionable among the rich to offer their extensive estates to the public use, meaning thereby to throw a sop to the poor, whose sentiments of revolt alarm the wealthy.

Corruption in public life has continued unabated. Much has been heard about the opium scandal, the South Manchuria Railway irregularities, the Tokyo municipal scandal. Scandals of lesser magnitude have been reported from all over the country. The question of the ever-increasing depravity of youth has become so insistent that, despite the new policy of drastic retrenchment, the Treasury perforce approved expenditure for a juvenile court and reformatory. Unemployment also caused many misdemeanors and crimes.

Laxity of morals operates notably among the intellectual classes.

It may be concluded that these phenomena are not transitory. All indications show that we are going to have another year of unrest, politically, industrially, and socially.

JAPANESE NAVAL ACADEMY.

Source: Reliable.

9 January, 1922.

The age limits for entrance to the naval academy are between 16 and 20.

The requirements for entrance are passing mental and physical examinations and possessing a good moral character.

Once a year the navy department publishes the number of cadets to be admitted at the next succeeding term and the date and places where examinations are to be held. Every Japanese youth of good character is eligible upon his own application to take the examination.

The examination is held at 43 different places in the Empire (almost every prefecture) under the supervision of naval officers about April each year. The prescribed number of students is selected from those passing the highest mental examination. If any of these fail physically, they are replaced by others who have passed, etc. No cadet is accepted until inquiry has shown him to be of good moral character.

The length of course is 4 years; three years at the naval academy (Etajima) as naval cadet and one year at sea as midshipman.

The naval academy is well equipped (especially with models), but instruments are not generally of the newest types. The equipment does not, however, compare very favorably with that of our own Naval Academy.

The entire course is conducted on the lecture system, each class being divided into four sections. Marks are assigned and standing determined by examinations. The maximum marks obtainable in each subject are: First-year men, 400; second-year men, 500; and third-year men, 600. Sufficient relative weight is assigned to each examination in a subject so that the total, if perfect, will give the above marks. Examinations are classed under two heads: "Personal" and "Class." They are held at irregular intervals, depending entirely upon the amount of important subject-matter covered, without advance notice.

In case of personal examinations the questions are different for each section, and are handed the cadets upon entering the classroom. When class examinations are held word is passed in just sufficient time to assemble all four sections at one time. There is only one set of questions for the entire class in this case.

The number of "personal" examinations held a month varies between 1 and 4, and the number of "class" examinations from 0 to 2, but usually one.

This system has been established during the past year to prevent cramming, with its attendant evils, which are especially pronounced in Japanese students.

Eleven months of the year are devoted to study and the twelfth to leave. There is no summer practice cruise, but on several occasions during the study year a section or half of one class is taken aboard an old man-of-war for about one week's cruise. Thus each cadet is given about one month's cruise during the year. Their duties on these cruises are confined to deck, navigating, and ordnance. Some

electrical and engineering instruction is given at the naval academy, although after graduation they are not required to perform such duty. Also at some time during each year all cadets are taken in sections to Kure Navy Yard (two hours away).

Cadets are seldom forced to resign as a result of failing in studies (they are actually too studious) and they are almost never dismissed for misdemeanor. The question of discipline does not exist. Their sense of honor, in this respect, is so highly developed that they deem it a disgrace to break a regulation, and having done so report themselves for it.

The only punishment inflicted is requiring the offender to wear a black cap (instead of white one) for a certain number of days, depending upon the seriousness of the offense. There was not one black cap in the entire brigade of 850 cadets on the day of this inspection.

Neither officers nor cadets are kept on duty at any time or place for disciplinary purposes.

The cadets sleep in four large bare rooms; one section of all three classes being in each room. Each cadet's clothes are stowed in a chest at the foot of his bed.

Each class is assigned one study room, and every cadet has his own desk in such room where his books, etc., are kept.

The cadets are required to wash their own underclothing, socks, handerchiefs, towels, etc. Heavier clothing, sheets, etc., are laundered for them. There are three large Japanese baths, each capable of holding 50 persons. In the same building are long rows of wash basins capable of accommodating half the cadets at one time.

Considerable instruction is given in Japanese fencing, Japanese wrestling and "Judo." An increasing amount of time and attention is being devoted to exercise and sports each year. In addition to the above-mentioned sports there are pulling races, competitive mountain climbing, track meets, swimming, Rugby, base ball, and several strenuous Japanese out-door games. Base ball seems to stand first in popularity.

The very noteworthy things are: First, that cadets, except during recreation hours, always move on the double, whether proceeding singly or in squads, and, second, that the entire brigade is drilled to march to war songs which it sings in unison. The reasons for these two practices are to speed up the cadets, getting them out of their slow-shuffling geta walk, and to make them lift their feet, throw out their chests, and walk with life and swing.

A club house, with adjoining canteen, is provided for the exclusive use of cadets during recreation hours.

All cadets 20 years old and over are permitted to smoke. By a law of the land no one under 20 years is permitted to smoke.

Greater stress and effort is devoted to instilling gentlemanly ideas and bearing than to any other phase of their education.

There are at present about 850 cadets at the naval academy; this is the largest number they have ever had, and it will be decreased in 1922 to about 680, 1923 to about 500, and in 1924 to about 350.

The class entering in 1916 started with 130 and graduated 120; the one entering 1017 started with 180 and graduated 175; the one entering 1918 started with 195 and graduated 190. (Nearly all those who failed to graduate in above three classes left school on account of sickness.) The classes entering in 1919 and 1920 were slightly over 300. The one entering in 1921 had 250 members, and the class entering in 1922 will have 130 members.

In 1920 a new practice was started whereby approximately 35 of the best chief warrant and warrant officers under 35 years old are selected, after competitive entrance examinations, for a one-year's course of special training at the naval academy. Those successfully completing this course are commissioned as special line officers and can eventually attain the rank of lieutenant commander.

TRAINING OF JAPANESE OFFICERS.

Source: Reliable.

9 January, 1922.

The time devoted to compulsory education by Japanese naval officers is unique and astonishing. Between 800 and 900 commissioned officers below the rank of commander (approximately 25 per cent of all officers in these ranks) are continually undergoing some form of advanced professional education.

While such special education is almost essential for Japanese officers, one of the principal causes for this employment of their time is believed to be due to the fact that the naval service is greatly overofficered, and it would be impossible to keep younger officers usefully employed in any other way.

Although essential to a certain degree, this amount of schooling has the great drawback of molding all officers in the navy to a standard form devoid of originality and initiative; which qualities are as yet little developed in any Japanese mind. A feature of this system of education is, however, worthy of careful consideration. The most brilliant and promising younger officers are continually searched for, both afloat and while in schools, and when discovered are given every assistance and encouragement to develop along the line of their specialty, which they continually pursue throughout the remainder of their naval careers. This is considered the highest form of selection so far developed by any navy of the world.

TSUKIJI NAVAL ARSENAL DESTROYED BY FIRE.

Source: Reliable.

20 January, 1922.

Early on the morning of January 7, 1922, the naval arsenal, Tsukiji, Tokyo, was burned to the ground. The building was a wooden structure 50 by 120 feet, completed in 1916 at a cost of yen 3,000,000.

The fire is reported to have started in the wireless testing room from an unknown cause.

Because the building contained secret apparatus and many models for testing, the firemen were not permitted to enter it, and in consequence the entire building and all its contents were completely destroyed.

JAPANESE NEWSPAPER AND OTHER PUBLIC COMMENT ON THE WASHINGTON CONFERENCE.

17 December, 1921, to 19 January, 1922.

Yorodzu, 17 December, 1921: "Japan's loss at Washington."

The results of the conference provoke anxiety as to the peace of the world and the future of Japan. Limitation of armaments became an issue only because America built a Navy to overwhelm Japan, thus compelling us to spend money out of an impoverished treasury. When the Japanese naval strength grew toward equal with the United States that country demanded limitation of armaments and drew up the proposals to suit her own selfish interests.

The quadruple entente calls upon Japan to protect the possessions of England and America and France in case of need. It makes Japan the slave of England and America. It shows not the slightest evidence of guaranteeing the safety of Japan. England, by virtue of her inability to discharge her debt to America, is obliged to cater to that country. Japan is misrepresented. Sentiment is ranged against her, and she is attacked as militaristic. The conference placed Japan under the yoke. Asiatics do not count in American and British eyes.

Kokumin, 17 December: "Leave the conference."

The Washington conference is to prepare for war. It was planned to hammer Japan flat. Japan is doing everything to aid the United States to win a war against her. Why do the people not rise in indignation when America presses us to the wall? The Japanese delegates should withdraw at once in order to atone for their failures before the nation.

Japan Advertiser, 17 December, 1921.

The following resolutions were adopted at a labor meeting held in Tokyo recently:

1. We indorse the idea of naval limitation and demand that all the capital ships in the world be scrapped.

2. We demand the immediate reduction of the Japanese land force by half and the shortening of the term of military service.
3. International warfare should be completely abolished.

Jiji, 18 December, 1921: "End of the alliance."

The Japanese acceptance of the 60 per cent ratio after claiming that 70 per cent was minimum necessary for the national defense leaves them open to the charge of bargaining while discussing the peace of the world. Were they sincere when they contended for 70 per cent?

The *Mutsu* should have been retained as a completed vessel. If America claims the *Colorado* and *Washington* (under construction) in return for the *Mutsu* and England demands to build two *Hoods* as a consequence, the principles of reduction of armaments and 10-year holiday are broken! To save the *Mutsu* the Japanese delegates became parties to the breaking of the fundamental principles. Now how can they face the people?

Hochi, 18 December, 1921.

The delegates at least saved their face by obtaining the *Mutsu*. The ratio, based upon completed ships, has now been broken by America. If the *Washington* is to be retained Japan should demand the retention of the *Kaga*. The whole ratio has been thrown into confusion by America demanding two ships with 16-inch guns. England is now complaining of throwing down the former proposal which was based on completed ships, while America is the one who overthrew it. Does not this seem strange, since America made the proposal. We can not but suspect America of expecting to attack Japan when she excludes Hawaii from those places where defenses are to be maintained as they are to-day. If she does not plan an offensive against Japan what is the need of the Hawaiian fortifications. We should, on the same ground as America claims for the defenses of Hawaii, claim the defenses of the Bonins and Formosa be exempted from the agreement.

Kokumin, 19th December.

When the proposal was changed to one for increasing armaments our delegates agreed.

When we see it, we can not help but deeply regret the utter lack of courage and competence of the Japanese delegates, who believed all they had to do was to save the *Mutsu*.

Yomiuri, 19th December.

We regret America has destroyed the principle for which the conference was called. We regret also the incompetence of our delegate and Government. We doubt now the sincerity of America.

Yorodzu, 19th December.

Our Government is foolishly honest and our people are really honest. England and the United States have spread the propaganda that Japan is a second Germany.

America, while calling Japan a second Germany, is herself a second Germany. Aggression has been America's traditional policy. America assisted the intrigue for independence in Hawaii and then annexed the islands. She acquired Guam and the Philippines by the Spanish War. In 1854 the American fleet came to Japan and menaced this country when there was no defense on the coast and demanded the opening of the ports. Had Japan refused to comply with the American request America was prepared to declare a war at once and to rob Japan of her possession of the Loochoo Islands.

America declared a war of independence against England in 1776. We shall here compare the wars against foreign countries by Japan and America in the 144 years since the war of independence. Whereas Japan fought only five wars—the Formosan War, the Sino-Japanese War, the Boxer War, the Russo-Japanese War, and the German-Japanese World War—America fought eight wars—the first war in Florida, the second war in Florida, the Mexico-American War, the Spanish-American War, the Philippine War, the invasion of Mexico, the Boxer War, and the European War: America fought three more foreign wars than Japan. Comparing the territorial expansion Japan only annexed Formosa, Saghalien, and Korea, totaling 19,000 square ri (1 ri equals 2.45 miles). America from the start of 13 States became 48 States, and adding the Philippines, Hawaii, Porto Rico, and Guam, the addition totaled 779,000 square miles. It shows how great was the American territorial expansion. Facts are more eloquent than anything else. Has America any qualification to call Japan an aggressive nation or a second Germany?

As for the maltreatment of alien races by the Americans, the lynching which is practiced still to-day is a concrete example of a most remarkable nature. The peace which America advocates is a peace by which she may oppress other nations in order to secure gains for herself. It is a peace for America's sake. It is not a peace for the sake of humanity. The justice and humanity of America is the justice and humanity which can go current in America alone. It is counterfeit justice and humanity. It is not a justice and humanity which will be common among all humanity and all the world. Indeed, aggression has been America's traditional policy.

The Prime Minister to Leaders of House of Peers at Budget Meeting, 19 December, 1921.

In reply to questions, the prime minister (Viscount Takahashi) made the statement that Japan had accepted the 60 per cent ratio

so as to obtain the consent of the United States to the agreement to maintain the status quo of the fortifications in the Pacific.

The vice minister of the navy (Vice Admiral Ide), speaking for the navy department, denied that the defence of the country need suffer because of the failure to obtain 70 per cent, stating that the navy would make up deficiencies in tonnage by increasing the efficiency of its fighting ships and by new tactical arrangements. He added that the national defense had been simplified by the agreement on fortifications.

The foreign minister supported the vice minister of the navy against the contentions that Japan should have obtained both 70 per cent and the agreement on fortifications.

The foreign minister stated briefly that circumstances had compelled the Japanese delegates to accept the American proposals.

Admiral Ide said that the delegates at Washington had stood out for 70 per cent as long as possible, but apparently had to accept the lower proportion because of the fear that their refusal to accept the Hughes plan would have a bad effect on the outcome of the conference.

Dr. Washio, 20 December, 1921: "Has Japan Been Defeated at Washington?" Dr. Washio is Employed by the Japanese Information and Publicity Bureau to Write These Articles.

Japan has yielded on practically every question. Her delegates have conducted a purely defensive campaign. They have been outgeneraled, outmaneuvered, outplayed, and outwitted.

The public is half amazed and half indifferent. Officialdom puts on a cheerful front and tries to make as felicitous comments as the circumstances permit, but from every quarter comes the whisper, "We are defeated."

The Japanese representatives failed to play a single trump card and lost their hand without ever having done anything whatever with it.

Their conduct of affairs lacked even an impressive air, a tragic gesture.

There seems little or no bitterness toward the delegates, only a state of philosophic resignation, amounting to a sense of relief, believing that nobody else could have done any better.

Although many characterize the quadruple agreement as a mess of pottage in return for the Anglo-Japanese alliance, they are contented to have it and the gain of an easy mind.

The man in the street says ironically, "It takes foreign interference to reform the Japanese Government." That Government is stern toward internal agitation, but extremely sensitive toward foreign opinion.

The greatest significance of the Washington conference for Japan is her decisive step toward the policy of nonobstruction. It is an actual tendency, no longer a mere intention. Japan is disillusioned of all hope of fighting a successful war with America. The abrogation of the Anglo-Japanese alliance and the announcement that England is to base a great fleet on Singapore notifies Japan that control of Far Eastern waters has passed from her hands.

Japan has been shown without actual war what Germany learned by testing her supremacy in the European continent. Shantung was Japan's Brest Litovsk. Japan is not in a position to challenge either the Anglo-American coalition or her great potential neighbor. She has to follow by the sheer necessity of her position the policy of peace at all costs and on all sides.

Can such a lesson, learned at so trifling a cost, and so successful a passage of a crisis, be considered a failure?

If Japan cherishes this moral victory, and bends her whole energy to improving her internal conditions (at present really more serious than any foreign problem confronting her) she may some day have cause to be thankful for the apparent defeat in the conference.

The Washington meeting brought no surprises. The delegates have succeeded, though in a feeble and pathetic manner, and with utter lack of eloquence, in laying down our imported burden of imperialism and militarism.

They have perhaps unconsciously pointed the only path this country can tread. Though included in the four-power agreement and the League of Nations, such mere forms should not blind us to the fact that in truth we are in very much the same position as the Germans who are excluded from either of the sacred pacts. If the Germans are suffering under a staggering indemnity, we are having our vitality sapped by the superabundance of money.

It is hoped that the sense of defeat in international rivalry will hasten the day of internal readjustment. If Japan can not face this problem with determination the lesson of the Washington conference will be entirely lost.

Yomiuri, 21 Deecmber, 1921: "Blunders at Washington."

The Government attempts to make it believed that Japan attained a success at Washington.

19 December, 1921.

The Jiji concedes that the Washington conference has already accomplished its object. The Yomiuri alleges that the Japanese Government has failed in every case. America had won brilliantly, but Japan has lost heavily, according to the Kokumin.

The Yorodzu declares that aggression is America's traditional policy. The Osaka Mainichi points out that America has been advocating peace mainly for America, but not equally for other powers.

21 December, 1921.

A National Young Man's Convention held in Tokyo on December 20 passed resolutions disapproving the naval ratio of 60 per cent and demanding the resignation of the Government and the delegates.

22 December, 1921, "Yomiuri."

A practical solution of the Shantung question is the original Chinese suggestion of securing the ownership of the Shantung Railway, with a loan agreement attached, with Japan, and with joint control.

Regarding the salt fields all Japan wants is the supply of the salt. The control of the fields is a minor question.

21 December, 1921, Chugai Shogyo.

We rejoice in the naval holiday, but are dissatisfied with the naval ratio. Our delegates made a diplomatic failure. We regret that America claims two uncompleted vessels to counterbalance the *Mutsu*, thereby destroying the fundamental principle. The Pacific fortifications should be abandoned altogether.

21 December, 1921, Yamato.

The delegates have made a mess of their job at the conference. We believe that Prince Tokugawa will feel his responsibility and tender his resignation as president of the House of Peers.

Kokumin, 23 December, 1921.

The Pacific is not the only place where war threatens. Why doesn't the conference settle the questions of Silesia, Siberia, the Balkans, and Czechoslovakia? Japan should have made a counter proposal that these be included in the agenda.

The quadruple alliance gives United States, Great Britain, and France the right to meddle in Far Eastern affairs. Japan is not only subjected across the Pacific, but now has her hands tied on the Asiatic Continent.

The authorities claim that the four-power alliance gives greater protection than the Anglo-Japanese alliance, but this is propaganda to cover up mistakes, and the people are not going to be deceived. It is plain that the three western powers are now marching on to the very gates of Japan.

Nichi Nichi, 23 December, 1921.

We had hoped that problems between the United States and Japan would be discussed at the conference. We regret the cowardice of the delegates that prevented this.

Yorozu, 23 December, 1921.

Japan's failure at Washington is due to the ignorance and inability of the delegates she sent.

Osaka Mainichi, 23 December, 1921.

The deadlock on the Shantung question will be a stain on the conference proceedings.

China's position is unreasonable and unfair.

Jiji, 24 December, 1921.

It is doubtful if any appreciable saving of money will be caused by the naval holiday. The money that would have been spent for the Navy will have to be used to make up the deficiency in the revenues. High prices will cause even greater expenses than before and we need not worry about the money that will be saved by a naval holiday. It will take care of itself.

Osaka Mainichi, 24 December, 1921.

When we heard the United States interpretation on article 1 we did not believe it. It seems now to be true, but if it is accepted by Japan the nation will be disgraced.

Osako Osahi, 25 December, 1921.

If China could pay outright for Japanese rights in the Shantung railway there would be no objection to Japan's agreeing. She can not do this, however, and does not take her financial obligations seriously. Under such a state of affairs Japan can not consider China's proposal.

Kokumin, 25 December, 1921.

Japan is pressed to the wall by foreign countries and disgraced.

Jiji, 27 December, 1921.

Submarines would be beneficial to Japan in scouting for the enemy and protecting the naval bases in case a fleet came to attack Japan, but if another country waged indiscriminate warfare upon Japan with submarines it is a question whether or not Japan could repel it. These two things should be taken into consideration before deciding the formula for submarines.

Kokumin, 28 December, 1921.

Japan should recall her delegates if tyrannical and arbitrary United States continues disregarding our national defense, as she is now, by demanding Japan stop building submarines. Submarines are purely defensive weapons. Our delegates are a conspicuous failure.

Japan Advertiser, 27 December, 1921.

The ruling spirit of Japan, with the exception of those who criticize for the sake of criticizing, is that the conference has been a success, and the people are satisfied, as a nation, with the results obtained.

Resolution Adopted by Members of the Opposition in the Diet, with the Approval and Indorsement of Mr. Yukio Ozaki.

The Government is to be regarded as having only insufficiently tried to secure the understanding of the nation as to the progress of the Washington conference.

Yamato, 29 December, 1921.

It is rather ludicrous that the question is now being raised as to whether the main islands of Japan come under the interpretation of insular possessions and dominions in the Pacific—referred to in the quadruple entente.

If it is to cover the main islands of Japan, it should also be applied to the mainland of the United States. If Japan alone is compelled to assume the position of the protégé of the other three powers in the entente, it means that her existence is guaranteed by foreign powers, and consequently she will be degraded to the level of China. There is no need to conclude so disgraceful a pact in order to save the face of the defunct and long invalid Anglo-Japanese alliance.

Japan Advertiser, 30 December, 1921.

The privy council has lodged a protest with the Government and demanded an explanation of the actions of the delegates, says the Chugai Shogyo, but the Government has so far made no reply. The members of the privy council base their opposition on the ground that ratification of the entente pact acknowledges a transgression on Japan's sovereignty. Under this pact Japan would have to confer with the other powers before defending her shores from attack.

Kokumin, 31 December, 1921.

We can not help but admire the patriotic and firm stand taken by France on the submarine question. It is too bad that our delegates and our Government are not so firm and determined. We wonder how they feel when they view the determination of France to defend her rights.

Yorodzu, 1 January, 1921.

France stands like a giant against the domination of the Anglo-Saxon domination, and in comparison the actions of our delegates is disgraceful.

From "Kokumin," December 16, 1921: "Two Uncompleted Ships for one Completed One."

Ever high-handed Americans turned down the spirit of the conference by breaking their own principle.

According to reports from Washington, the United States agreed to Japan's retaining the *Mutsu*, and as the condition for doing so she is to get the *Colorado* and *Washington*, which is overthrowing the spirit of the conference fundamentally by her disregard for her self-set principle. The reason Japan strongly insisted on keeping the *Mutsu* was in strict keeping with the principle of American proposal which was based on ships completed. Mr. Hughes, however, stubbornly refused this, saying that the inclusion of the *Mutsu* would upset the ratio 5–5–3. Both sides stood firm on their contention. In asking to retain the *Mutsu*, Admiral Kato based it entirely on the fact that she was a completed ship, and did not mean to trade her for the *Settsu*, but since Mr. Hughes objected so much to the increase in the Japanese allotment, he decided to sacrifice some 20,000 tons, and proposed to scrap the *Settsu* if allowed to retain the *Mutsu*. But even this Mr. Hughes refused to concede. The contention of the United States that the *Mutsu* is an incomplete ship is only a disguised pretext and her real objection was for letting Japan have two ships with 16-inch guns, her ultimate object being to arrange so that she will always have a more powerful fleet than Japan. Such being the case, when Admiral Kato pressed for Japan's retention of the *Mutsu*, the United States seems to have declared that if Japan retains the *Mutsu* she will have to complete the *Colorado* and *Washington*. If it was America's proposal to complete the *Colorado* only, so as to make both sides possess two ships with 16-inch guns, it would be more reasonable to demand the completion of two most powerful ones for Japan. Trading the *Mutsu* for the *Settsu* is, indeed, arbitrary and high-handed. This places Japan's capital-ship tonnage at 311,320 tons, against the United States 525,830 tons, which is decidedly in the latter's advantage.

From Jiji of 17 December, 1921: "Militarism Exposed," by Mr. Yukio Ozaki.

As the result of Japan's insistence for the retention of the *Mutsu* the powers finally agreed to this, and in consequence the United States is reported to have demanded the retention of the *Colorado* and *Washington*, all of which I think is a great mistake for Japan. As repeatedly said, the Washington conference had for its main object the limitation of armaments and the laying of a foundation for world peace—nothing else.

In this conference, Japan, which is regarded by other powers as the foremost militaristic nation, fully bared her own self, and refused to accept America's great proposal which was a great sacrifice to

herself, and insisted on a 70 per cent ratio adhering to mere technical principles, and finally brought about the retention of the *Mutsu*, all of which must be considered extreme folly. By doing so it made the others suspect us more, and besides we thus accomplished the original nonjustifiable object against the fundamental principle of armament limitation, and dragged the United States into this—which is very much to be regretted.

From Nichi Nichi, 16 December: "Naval Ratio Agreed Upon—American Conditions Unbecoming Peace-Loving Country Like the United States."

The inclusion of the *Mutsu* gives Japan two 16-inch gun ships and rounds out the navy so far as fleet formation is concerned. It is regrettable that America unjustly endeavored to exclude the clearly completed *Mutsu* and herself included two uncompleted ships, thus entirely disregarding her self-set principle. If such an unreasonable proposal as this stands good Japan should ask to include the *Kaga*, thus giving each side three such capital ships. The present development shows that the American experts' long-considered proposal has been fundamentally thrown over and Japan compelled to consent to such an inconsistent proposition. This is an attitude very unbecoming to a great and peace-loving country like America.

Viscount Aoki, Member of House of Peers, in Hochi, 9 January.

Though the achievements of the Washington conference so far recorded are not fully satisfactory from the Japanese standpoint, the once strained Pacific situation will be remarkably relieved by the Pacific entente and the Far Eastern (nine power) agreement. Certainly Japan ought to be content with these results of the conference.

Minister of War in Speech on January 9, 1922.

It is wrong to consider a martial spirit as incompatible with limitation of armaments. In a certain sense armament is an expression of national power which is the sum total of various kinds of individual energy. Modern warfare, for instance, demands national industry besides shells and bayonets. Therefore, if a nation is to advance and hold its own in the industrial competition that must necessarily follow on the establishment of a world peace, its martial spirit must be expanded and developed to just such a degree as the actual armament is reduced.

Asahi, 10 January, 1922: "Scolding the Delegates."

Washington conference may be considered successful on the whole. Peace and civilization being the common ideal of mankind the conference has accomplished great results in the short space of time. It

is regrettable that the Japanese delegates confused the world as to whether 70 or 60 per cent ratio was the minimum naval strength necessary for her national defense. Saving the completed *Mutsu* at the cost of the *Washington* and *Colorado* and two new major ships for England was also regrettable. The delegates also showed stupidity and lack of spirit in the matter of the question of the inclusion of the Japanese mainland in the sphere of the entente.

Chugai Shogyo, 10 January, 1922: "Conference Results Unsatisfactory."

It is too bad that the representatives of the powers at the Washington conference lost sight of the principles of Mr. Hughes's original proposal and introduced selfish changes. The absence of harmony between England and France has been principally responsible for this disappointment. Both these countries must hold themselves responsible for the obstruction of the limitation of submarines and auxiliary craft.

Mr. Kentaro Mochizuki, Kenseikai (Opposition), Observer at the Washington Conference.

"Although the representatives of all nations at the Washington conference insisted on the adoption of policies of right and justice based on their national viewpoints, the conference is a great success in bringing about permanent policies for the world peace."

Mr. Mochizuki clings to the idea that the Japanese delegates are not representative of the spirit of the times, but are imbued with the ideas of bureaucracy and at a disadvantage when compared with delegates of a democratic frame of mind.

He declared it a misfortune for Japan that Admiral Kato compromised on 60 per cent after insisting on 70, thereby giving Europe and America the idea that Japan was bargaining. Allowing Hawaii to be placed outside the sphere of limitation was also a blunder.

Prince Tokugawa's alleged reluctance to explain to the world Japan's faithfulness to her ally Great Britain in keeping to the letter the terms of the Anglo-Japanese alliance also was bitterly criticized by Mr. Mochizuki, who believes that Japan lost a great chance there to win a higher place in world regard.

Mr. Mochizuki praised President Harding highly for his statesmanship and personal qualities. President Harding granted an hour's audience to Mr. Mochizuki and discussed Japanese problems with the opposition leader.

"The Japanese delegates have no plan or suggestions regarding the Chinese problem," said Mr. Mochizuki. "They have no plan to present to the world, but deal simply in negative answers. They act as if they were students preparing for examinations the next day,

who must be prepared to answer according to formula. They forget their position of master and assume that of humble and obedient pupils."

President of Nippon Yusen Kaisha, 10 January, 1922.

The solution of questions of naval armament limitation and those in the Far East, as well as the formation of the quadruple entente, will greatly stimulate the revival of business and industry in various countries and also bring favorable opportunities to the growth of immigration, colonization, and foreign trade in the world, which will, in turn, increase the volume of cargoes to be transported by ships of maritime countries.

Mr. D. S. Kim, Korean Journalist, 11 January, 1922.

Mr. Kim considers that Japan scored a great diplomatic success at Washington. He considers the conference a success only in principle.

Disarmament to the 5–5–3 ratio will lessen the tax burdens of the principal nations of the world, but with the ratios as they are there is no insurance that war will not come, declares Mr. Kim.

China, he thinks, has not been successful at the conference, largely because the delegates and the people at home expected too much.

Yomiuri, 11 January, 1922: "Disappointment at Washington Conference."

The many causes of dispute between America and Japan have not been properly disposed of at the Washington conference. The grandest object of the conference—to insure permanent peace in the Pacific—has not been accomplished. This is not the fault of our delegates.

The naval holiday has lightened the taxpayers' burden, but will not act as a deterrent of war. The quadruple entente does not eradicate the danger of war in the future.

Jiji, 11 January, 1922.

If the Root principle of restricting submarines is made an international law, we will not hesitate to welcome it as one of the great successes of the Washington conference.

Yorodzu, 11 January, 1922: "Prohibit Poison Gas."

America has been opposed to the prohibition of poison gas, but has been prevailed upon by Britain and the other countries to forego her objection. If this is agreed upon, and we believe it will, it will be one of the greatest successes of the conference from the standpoint of humanity.

Miyako, 11 January, 1922: "Coming Back from the Conference."

Regardless of whether or not Japan has been successful at the conference, we must acknowledge that a basis for peace has been laid. We must respect the decisions of the conference.

Japan Advertiser, 14 January, 1922.

The Kokuminto Party may be joined by the Kenseikai in its effort to cut the army in half. The Kenseikai Party, however, while admitting that reduction in armies should logically follow naval limitation, believes that it is a question for experts to decide, and not a political issue.

Kokumin, 15 January, 1922: "Washington Conference a Failure."

The conference has proved a failure after all. The ratio allowed Japan is far from fair. Competition in the building of auxiliary craft will follow. Japan may be called upon to scrap 20,000-ton battleships and build 10,000-ton cruisers. This is wasteful and preposterous. It will frustrate Japan's attempts to economize naval expenditures. Armament limitation is therefore a failure.

Yorodzu, 15 January, 1922: "Japan Has Been Cheated."

The Japanese delegates have finally awakened to the fact that their blunders have put Japan into the position of being called upon to dismantle the defensive works in the Loochoo Islands, as not being part of the homeland of Japan.

If the United States does not accept our protest and modify her interpretation, Japan should declare the agreement null and void.

Asahi, 15 January, 1922: "Naval Budget Cut Now Expected."

The Tokyo press says altered program will save vast amount of money for Japan annually. Japan will build light ships. First year's savings may be used for solving the unemployment problems.

The naval estimates embodied in the budget for the fiscal year 1922–23, totaling about yen 393,000,000, are based on the continuation of the 8–8 program which will be made obsolete by the agreements expected to result from the Washington negotiations. A large part of this appropriation was asked for the construction of capital ships which will now be scrapped, and a revision downward of the estimates is considered the obvious course for the Government.

The authorities of the finance department, however, say that this can not be done in time to present a revised budget to the present session of the Diet which will convene for business on January 28.

It is understood that the naval and other authorities of the Government have already worked out tentatively a new program of naval replenishment which will conform to the expected Washington agree-

ment, relinquishing the famous 8–8 program and substituting therefor plans for building cruisers, light cruisers, destroyers, submarines, and airplane carriers.

The Hughes proposal will permit Japan to complete within the next 10 years all the auxiliary craft projected under the 8–8 program, including 4 first-class cruisers, 15 light cruisers, and 60 destroyers (first and second class), besides a considerable number of submarines; also to build between 30,000 and 40,000 tons of additional airplane carriers.

The tactical organization of the navy, as soon as the naval agreement comes into effect, will be a unit of six battleships and four battle cruisers.

Kokumin, 15 January, 1922: "Conversion of Ships."

The *Akagi* and *Amagi* (both CC) and the *Settsu* and *Aki* (both OBB) will probably be converted, the first two into airplane depot ships and the other two into training ships.

Asahi, 16 January, 1922: "English-American Understanding."

In spite of the fact that the question of the Pacific fortification was agreed as early as the 15th of December according to the Hughes proposal, England has now brought forth a new proposal (to limit the application by longitude and latitude) and it is thought that there is an understanding between the English and American delegates. The reason England proposed this plan is believed to be due to their desire to reserve for themselves the right to fortify Papau in the future. America, on the other hand, desires to purchase the Galapagos from Ecuador as a protection for the Panama Canal, and for this reason they are believed to have supported the new English proposal.

Asahi, 17 January, 1922.

Japan should hold the right to fortify the Bonin Islands even at the expense of destroying the treaty.

Chuo, 17 January, 1922.

Japan should fortify only the islands of Oshima and Ibi, and should agree to not fortify other islands of the Pacific. This should satisfy America. It is a fact that it is the prerogative of any nation to decide upon what constitutes national defense, without foreign interference.

The Japan Advertiser, 17 January, 1922.

The national budget, 1922–23 provides for the expenditure of 1,600,000,000 yen, some 50,000,000 yen more than last year. The naval budget provides for a reduction of about 100,000,000 from last

year and that of the army yen 4,000,000 more. As capital ship construction is to be stopped for 10 years, persons interested in the development of education are clamoring for the savings to be diverted into that channel; others clamor for the savings to be used in improving the postal, telegraph, and railway communications. But the savings from naval construction will likely go into naval construction.

Interview of Mr. Etsujiro Uehara, a Leader of the Kokuminto Party Just Returned from Washington.

The Japanese delegates were just like old-clothes dealers wrapped up in out-of-fashion diplomacy. They have been miserably deceived by the other delegates, thus betraying the expectations entertained by the Japanese people regarding their success at the conference. knowledge, and ability of the delegates. Japan alone of all the important questions at the Washington conference have been made public. In other words the conference has been a test of the wit, knowledge, and ability of the delegates. Japan, alone of all the nations sent delegates to represent a bureaucracy. The Japanese delegates were timid, with no principle or wisdom, not to speak of their slowness of speech.

Kokumin, 19 January, 1922.

The army authorities are investigating the proposition of reducing the army by 50,000 men and the adoption of modern weapons to offset the reduction in men.

Yamato, 19 January, 1922.

We take the definition of the territory for limitation of Pacific fortifications between 30° north of the Equator and from 180° east to the coast of the mainland of China as extremely unfair and inappropriate.

The Bonin Islands are a component part of Japan, and is in an entirely different status from Hawaii.

CONDITIONS IN MEXICO.

Source: Reliable.

16 February, 1922.

Information received recently from Oaxaca by the department of war states that the rebel Martin Suarez, who has been in revolt for some time, recently attacked the town of San Pedro, but forces of Gen. Maycotte which got to the scene in time completely routed the rebels.

In view of the many insistent rumors that rebel movements are being initiated in the north the secretary of war in answering the press

states that the rumors have no foundation, but were the reports to turn out true, the Government has no concern, as it can crush any and all movements. The evening of January 29–30, and practically all of the 30th, chauffeurs were on strike because of the socialist governor's wishes to force all into the chauffeurs' union. All those who did not exhibit membership badges were arrested, but this effort failed as the press vigorously attacked the governor.

Official information received states that Government forces in Coahuila engaged the rebel gangs under the leadership of rebel N. Herrandez, Demetrio Torres, and Gidro Gaova and routed them. Other notices, however, just received indicate that other rebel gangs have appeared in said State led by Julio Flores and Garduno and have been attacking and sacking properties in Monclova and Oriente.

I inclose herewith a photostat copy of a letter addressed to the supreme court of the Mexican Nation, signed by Gen. Basave y Pina, in which he openly charges that the orders to do away with Carranza were given by Gen. Obregon himself, and that the arrest of Gen. Rodolfo Herrera is an attempt to make a scapegoat of Herrera. Basave y Pina was the man through whom the orders were given, and it is well known here that subsequent to the death of Carranza the said Basave y Pina enjoyed quite a period of prosperity. Military men frankly admit the Government steadily satisfied his demands for money until it got tired of doing so, and then the displeasures ensued that turned him into the ranks of the rebels. He is an unscrupulous man who has been known to lend himself to any shady deal. Military circles here admit that he was at the time of the Tlaxcatatongo attack attached to the Pelaez forces and through the said source the attack was instigated. While the date is old, this letter has recently been given much circulation by the revolutionary parties in the hope of inducing many to revolt.

Basave y Pina is now in revolt in the State of Michoacan, but he is considered too disreputable to have any important following.

The seriousness of the situation, as I am reliably informed, is now at the Isthmus of Tehuantepec, where Chico Castillo and Cortes with 400 followers are attacking small garrisons and keep in contact with rebel Gen. Aleman, who is credited to lead 900 men in the mountains between Tierra Blanca and the isthmus.

The Government is awake to the seriousness of the aforesaid rebels, and has dispatched troops both from Vera Cruz and this city, I am informed, to the number of nearly 5,000 men, in a determined effort to crush them.

From the north also unusual activity is spoken of, and information from private sources is that the federal troops at Camargo Tamaulipas, near Laredo, revolted and interned in the mountains when informed that a strong federal force was approaching to en-

gage them. Fears are also entertained that Col. Lindoro Herrandez in the Sierra de Puebla with 200 men well mounted and armed may attack some neighboring towns, though it is not clear whether he is actually on revolt against the central government or displeased with State authorities.

From Morelia Michoacan information states that Col. Corderras revolted against the local authorities with a following of about 200 men and that forces have been dispatched to engage him near Maravatio. It is officially announced that Gen. Serrano will be made secretary of war on the 14th instant.

On the morning of the 2d instant Maj. Jose Illescas was shot in this city for complicity in a revolutionary plot.

Also official information received states that Gen. Murguia as head of the restoration movement crossed into Mexico on the 2d of February and that accompanying him were Gens. Gonzalez, Villasenor, and E. Harrandez. Lucio Blanco and Maytorera also enter Sonora and Cantri Lower California. General reports coming in and also appearing in the press are foreboding ill, though the war department minimizes their importance.

LETTER ADDRESSED TO THE SUPREME COURT OF THE MEXICAN NATION BY GEN. BASAVE Y PINA.

All true and loyal revolutionaries wish you a very happy New Year provided you effectively cooperate towards the immediate removal of the present "Honorable" President Alvaro Obregon, murderer of the constitutional President of Mexico, Don Venustiano Carranza, as is *fully proved* by the present photographic copy taken from the original. If you conduct yourselves in a worthy and energetic manner during the year 1922, may the country reward you.

To the Honorable Supreme Court of Justice of the Nation:

I, the undersigned, Alberto Basave y Pina, citizen of Mexico, appear before your high authority, as best procedure, and testify:

That through the press of the capital, I am informed of the apprehension of General Rodolfo Herrero, by order of the judge conducting the open proceedings for investigating the death of Senor Venustiano Carranza;

That by the apprehension of General Rodelfo Herrero, it is to be inferred that it is desired to have him appear as the only person responsible for the death of Senor Venustiano Carranza;

That in the fulfillment of my duty as a citizen, I declare and designate before the supreme court of justice and before the entire nation, as sole author of the crime under investigation, General Alvaro Obregon:

That General Alvaro Obregon gave the orders to me, the undersigned, for transmission to General Herrero "in order that the retinue of Senor Carranza should be overcome and *the report delivered that Senor Carranza was dead;*"

That I know that I should have addressed myself in this case to the procurator general of the republic, and I did not do so because no citizen has any

confidence in the legality of the judicial procedures of this functionary, the servant of the author of the crime which is being prosecuted;

That I consequently reported to your high authority as the true representative of justice in the country;

That the supreme court of justice through the proper channels exhort General Alvaro Obregon, author of the murder of Senor Carranza, to make a declaration and if possible clear his conscience of the load weighing upon it;

That, consequently, Senor Herrero was only a soldier fulfilling the orders received by him and, in the next mail, I shall transmit to the supreme court of justice proofs and important data in the most ample form and which will be more than sufficient;

That I shall present myself before the competent judge when the culprit, General Obregon, is at the disposition of this same competent judge, and under formal arrest;

That I am transmitting copies of this same statement to all the chancellaries and press of the entire world and to the national Mexican press for the purpose of having General Obregon recognized as the true author of the crime committed on the person of the President of the Republic, Don Venustiano Carranza;

That I deny in advance the charge that the perpetrator of premeditated homicide, General Alvaro Obregon, may lodge against me in order to evade his own responsibility, that I am a man of deranged mind;

In virtue of what is set forth above, and in order to establish my claim before the supreme court of justice, I declare:

DE FACTO.

Senor General Alvaro Obregon gave the orders to me, the undersigned, for transmission to General Rudolfo Herrero, "in order that the official escort which was accompanying the constitutional President of the Republic, Don Venustiano Carranza, should be overcome and report delivered to Senor Obregon that Senor Carranza was dead."

DE JURE.

I. General Alvaro Obregon is responsible for the intentional crime of the fourth degree, as author of the murder of Senor Don Venustiano Carranza (articles 18 and 49, Part I, of the Penal Code of Mexico).

II. General Alvaro Obregon is guilty of the crime of intentional and premeditated homicide against the person of Senor Don Venustiano Carranza (articles 560 and 561 of the Penal Code of Mexico).

III. General Alvaro Obregon, as the perpetrator of the crime referred to in the preceding article, should be suspended, deprived of and incapacitated for any position or public charge, and deprived of all honors inherent therein (articles 153, 154, 155, and 156 of Chapter IX of the Penal Code of Mexico).

I respectfully request the supreme court of justice to enter my petition and act upon it through the proper channels, and, considering the gravity and importance of my accusation, I hope for justice from this high authority for the welfare of the Mexican Nation and as satisfaction of a duty fulfilled. Otherwise, the Mexican people and the entire world would hold the magistrates, to whom I address myself, responsible of complicity in the eyes of history.

Suchiate-Chiapus, Mexico, December 20, 1920.

(Signed) ALBERTO BASAVE Y PINA.

PORTO RICAN PROPAGANDA.

Source: Señor Coll y Cuchi.

5 January, 1922.

The president of the chamber of deputies of Porto Rico, Señor Coll y Cuchi, is now visiting Madrid and recently delivered a lecture on "Porto Rico after 21 years of American domination."

The ambassador and all the embassy staff were all especially invited to attend, but none of them did so.

The lecture was attended by many of the most prominent men of Madrid, who manifested great enthusiasm at the sentiments expressed.

Count Romanones, one of the leaders of the Cortes (and the head of the party to which the minister of marine belongs) introduced the speaker.

All of the newspapers contained eulogistic accounts of the lecture.

The following translation gives a brief summary of the remarks:

LESSONS FOR SPANISH-AMERICAN PEOPLE—LECTURE OF THE PRESIDENT OF THE CHAMBER OF DEPUTIES OF PORTO RICO.

The president of the chamber of deputies of Porto Rico, Don Cayetano Coll y Cuchi, did not dissapoint those who went to hear his lecture on "Porto Rico after 21 years of North American domination—Lessons for Spanish-American people."

The lecturer said:

I am going to speak of the only Spanish people which at the present time are not free, do not govern themselves, although in them exists as in no other people of America the true spirit of our race.

The Spanish representatives at the treaty of Paris intended to conserve the Spanish domination in Porto Rico, and only acceded to the transfer after having the formal promise that the Senate of the United States would pass laws which would give independence to the island. On the part of the United States the treaty has not been complied with.

Upon the retirement of the Spaniards, there followed in Porto Rico a period of confusion; a military government was established. The existing circumstances might account for this political state; but very soon it became apparent that the Republic of North America aspired to Americanize the island, commencing immediately by radically changing the Spanish laws. As soon as the inhabitants became aware of this, a reaction began. The Porto Ricans had believed that the change of sovereignty meant independence for the island.

A generation of their students, educated in the universities of the United States, Anglo-Saxonized, commenced to participate in the public life of Porto Rico; but this generation was not willing that the islanders should be Americanized, for the culture acquired in America, had not exterminated nor reduced the traditional sentiments, nor could it extinguish in us the brilliant spirit of our Spanish race. [Applause.]

Then commenced the struggle, for the people were determined that they must make a collective effort in order to save our own judicial institutions and to maintain our own ancient customs and laws, against those that were being forced upon us.

In 1909 the American Government tried to suppress the Spanish language as the medium for instruction in the schools. The indignation of the public was general; but the resistance to this order did not begin with the politicians, but with the scholars, with the children who declared a strike before they would consent to be taught in the English language. The children were expelled from the schools. The islanders started a Spanish institute in order to give them instruction.

The Unionist Party was formed to promote the interests of Porto Rico; it occupied a very high position and gained elections and principally devoted its admirable efforts to insure equality before the law, freedom of speech, personal security, the separation of church and state—in fact everything which constitutes in reality (I do not speak of laws which will not be complied with) the elevation of human greatness [Applause.]

And economically we made equal laws for the rich and poor, equalizing the burdens of taxation, so that they fell not only on those who worked but also on those who exploited labor, and voted for the prohibition of alcohol without stopping to consider that it would reduce by 50 per cent the receipts of the treasury, and terminated entirely the exploitation of vice by the State, abolished gambling, built roads over the entire island and, finally, devoted to purposes of education one half of the receipts of the treasury. All this we did and of it we are proud. [Great applause.]

Such a high example of patriotism by an island inhabited by 1,300,000 Spaniards under the presidency of the famous patriarch, Wilson, gave support and encouragement to weak nations. And to the policy of the great statesman, kind and just, Porto Rico responded, placing under arms 140,000 soldiers, who, without being free, were ready to die for liberty.

And if this could be done by the Porto Ricans, what could not be accomplished by 26 nations of our race, or over 110,000,000 of Spaniards settled in fertile lands, if they united to defend their traditions, unifying their interests, adopting a common tariff law, interchanging students, adopting the same system of military organization, and an equalization of the values of credits and moneys. This, and no other, is the real Spanish-American Union, which, of course, must recognize the absolute independence of all the countries comprising it.

If this could be, it would not happen that President Harding would convene the Washington conference without paying any attention to the nations of our race, and that four countries would secure the exploitation of their possessions and the domination of the Pacific, without considering the Spanish countries which own 76 per cent of the coast line of that ocean.

The audience gave a prolonged tribute to Señor Coll y Cuchí on the termination of his notable lecture.

SPANISH COAL.

Source: Reliable.

7 January, 1922.

A royal decree signed December 23 provides for the temporary payment of a bonus by the Government for a period of three months, beginning January 1, of 5 pesetas per ton to all Spanish coal shipped by Spanish vessels in the coastwise trade from Asturias to other Spanish ports.

It is necessary, in order to secure the benefits of this law, that the beneficiary should be Spanish or a Spanish company, and possess mines at present in exploitation, submitting at the same time an oath as to the total amount of production during the last two months.

This decree is of a temporary character, designed to encourage and assist the Spanish coal mining industry, which is at present undergoing a severe crisis, owing to the competition of British coal at ruinous prices.

A short time ago an arrangement was made whereby Spanish railway companies shall be obliged to buy 85 per cent of their total consumption in Spanish coal, and the Minister of Public Works is now studying the advisability of applying this same law to all national industry, whether receiving state aid or not, and to the Spanish Navy in its home bases.

The latter part of this proposition, however, is being strenuously opposed by the naval authorities, who claim that *Spanish coal can not be used in the furnaces without great loss of economy and steaming radius.*

SPANISH GOVERNMENT CRISIS.

Source: Reliable.

23 January, 1922.

Last week there occurred quite a serious crisis in the Spanish Government, which was the culmination of the long fight of the army "Juntas," or officers' committees, with the minister of war, Señor La Cierva.

The "Juntas" are unofficial organizations of officers in all branches of the army, originally for the purpose of improving the conditions of the army, but lately they have become very powerful and have protested strongly against civilian control, and particularly against the administration of Señor La Cierva.

The "Juntas" have the support of the army, but are not generally popular with the people, who blame them for the continuation of the war in Morocco, in which there is very little interest or enthusiasm.

The activities of the "Juntas" have lately become so insubordinate that the Minister of War demanded their immediate dissolution, which order was accepted by each branch except the infantry. The Government then presented to the King for his signature a royal decree, forcibly dissolving all the "Juntas," which at first the King refused to sign. He gave as his reason that he wished time to consider and investigate the situation, but the general impression was that he feared serious trouble with the army should the decree be

issued. The government of Señor Maura (the prime minister) then resigned, and all of the other political leaders refused to have anything to do with the formation of a new government unless the King sign the decree. After several days of discussion, the infantry junta finally fell into line, the decree abolishing all juntas was issued, and Señor Maura resumed office, taking back with him the entire cabinet, including La Cierva, who, it was generally believed, would certainly not continue as war minister.

Señor La Cierva is one of the strongest men in Spain. He is the most talked of and, by his enemies and the army, the most hotly assailed politician in Spain.

Considerable doubt seems to exist as to whether or not the question of the juntas is finally settled.

UNITED STATES NAVAL DETACHMENT IN TURKISH WATERS.

Source: Official.

3 January, 1922.

It is reliably reported that an Italian mission is in Angora negotiating with the Nationalists for an agreement, but it is probable that in view of the discord between France and England that has been aroused by the signing of the Franco-Nationalist pact, the Italians will not actually sign an agreement at the present time.

In Cilicia the Turks are gradually taking over from the French. It is probable that for the time being civil matters will be in the hands of the Turks and military matters in the hands of the French, pending the final withdrawal of the French early in January.

Certain Christian refugees from Cilicia have arrived in Constantinople, but by order of the commanding general of the allied forces they have not been allowed to land. Press reports state that refugees have been refused permission to land also at Smyrna and Alexandria. The feeling of panic among the Christian population of Cilicia seems to be subsiding to a certain extent. The attitude of the American high commissioner regarding the inadvisability of deporting the Christians from Cilicia has not altered.

Under date of December 12, from Danzig, the commanding officer of the U. S. S. *Reuben James* (senior American naval vessel in the Baltic) reports:

We have established direct radio communication with Petrograd, but though we can hear Moscow working, they have never made the attempt agreed upon to communicate with us. Apparently they prefer to use Petrograd, and though only one test message has been sent via that station, calls are exchanged each day. I judge from a message intercepted that the land wire communication established between Moscow and Warsaw is working satisfactorily.

On New Year's day I sent the following telegram to Mr. Walter Brown, head of the American Relief Administration, with headquarters in London:

A happy New Year to you, as I know it will also be to the Russian people, for all you and the American Relief Administration are doing for them. Congratulations on the smoothness of working of all your arrangements in connection therewith.

He replied as follows:

In extending heartiest greetings for the New Year the American Relief Administration desires to thank you for the comprehensive and helpful interview given out by you in Rome to Public Ledger correspondent on conditions in Russia and on our attempts to alleviate it. For your information we are starting shipments against $20,000,000 congressional appropriation immediately, using mostly Baltic ports, but we expect to put about 25,000 tons monthly through Novorossisk. Most appreciative of your continued support and approbation.

BROWN.

This correspondence is quoted in order to emphasize the fact that the communication system of the relief administration is working satisfactorily, and it may be possible later on to withdraw the *Reuben James* from the Baltic. Rear Admiral Bristol will be able to handle the communication question at Novorossisk with the destroyers under his command.

Naples.

The Italian newspapers announced that on Christmas Day, at both Sebenico and Spalato, Dalmatia, Italian sailors were insulted and roughly treated by citizens in protest against the presence of Italian men-of-war in Dalmatian waters. On December 27 the Italian Government sent the destroyer *Missori* to Spalato. This resulted in a demand of the population of Spalato to the Government at Belgrade that representations be immediately made to Rome requesting immediate withdrawal of Italian warships from the ports of Yugoslavia.

It is difficult to see why the Italian Government maintains destroyers indefinitely in the ports of a friendly power when by its own regulation it refuses to permit the same privileges. It was generally understood that when we withdrew our ships from Spalato,

the Italians would do the same. As they have not yet withdrawn from the third zone of Dalmatia, there is growing up in Yugoslavia a feeling of hostility toward Italy which can only result in serious trouble in the future.

The Italian minister of marine and naval authorities were very indignant over the attitude of France on the submarine question in the conference at Washington. The Italians are intensely jealous of France. The minister of marine stated that Italy was at the mercy of any power that could close to them the Straits of Gibraltar and the Suez Canal as avenues of supply to Italy in time of war. He maintained that it was of the utmost importance for Italy to possess submarines for this reason, but that for France to possess such a large force was a peril to Italy.

During the stay of the *Utah* in Naples the chaplain of the ship arranged two excursions of enlisted men to Rome, which were highly successful. On December 29 a number of enlisted men took a wreath of flowers and placed it on the grave of the unknown soldier. The ceremony was a spontaneous act on the part of the enlisted men, but news of it reached the press through the American Express Co., who were making the arrangements for the trip. Accordingly there were many moving-picture men and photographers present and quite a crowd of people gathered. The incident was the subject of much favorable comment in the Italian press and no doubt was telegraphed to the American press.

A RÉSUMÉ OF THE TACNA-ARICA CONTROVERSY BETWEEN CHILE AND PERU.

Source: Military Intelligence Division.

I. Historical.

The present Chilean Province of Tacna, composed of the departments of Tacna, Arica, and Tarata, came under the jurisdiction of Chile by the treaty of Ancon, ratified in 1883 to close the War of the Pacific, which had raged between Chile on one side and Peru and Bolivia on the other during the years 1879–1883.

The territory in question was Peruvian in every sense prior to the War of the Pacific, and understanding of the present difficulty will be more easy if it is realized that the historical background of the Tacna–Arica question extends no further, as regards the claims of Chile, than the treaty of Ancon. The prewar territory of Peru extended much farther south, in fact, than Tacna and Arica, and included the present Chilean Province of Tarapaca.

The cession to Chile of Tacna (i. e., of the present Province of Tacna, which includes the departments of Tacna, Arica, and Tarata, and which is popularly spoken of as "Tacna-Arica") was not complete, the treaty of Ancon providing that Chile should exercise complete control over the territory for a period of 10 years, at the end of which time the ultimate sovereignty should be decided by a plebiscite of the inhabitants. It was provided further that the country unsuccessful in this plebiscite should pay to the successful one an indemnity or quitclaim of $10,000,000 Chilean gold, or, roughly, 3,000,000 United States dollars. By an unhappy oversight, the treaty of Ancon did not stipulate the exact conditions under which the plebiscite should be held, the most unfortunate omission being one having to do with the qualifications of those inhabitants who would be allowed to vote. Instead of setting forth exact conditions, the treaty in question provided that an additional and special protocol should be ratified at a later date between the two countries and that the definite regulations for the plebiscite should be contained therein.

The whole treatment of the Tacna-Arica matter in the treaty of Ancon may, in fact, be termed a begging of the question. By the same treaty Chile obtained the present Province of Tarapaca from Peru and that of Antofagasta from Bolivia, and these she regarded as the really valuable spoils of the war. Tarapaca and Antofagasta, with their rich nitrate beds, their considerable mineral wealth, their harbors, and their strategic commercial situation with regard to the Bolivian territories, were the real prize of the war, and there is little doubt that Chile was willing to leave the Tacna-Arica matter more or less at loose ends in order that she might, by conceding something, be in a more secure position to demand the more valuable territory.

Article III of the Treaty of Ancon, having to do with the future determination of the sovereignty of Tacna and Arica, is as follows:

III. The territory of the Provinces of Tacna and Arica, bounded on the north by the Sama River from its headwaters in the mountains bordering Bolivia to its mouth, on the south by the Camarones River and the Camarones Valley, on the east by the Republic of Bolivia, and on the west by the Pacific Ocean, will continue in the possession of Chile and subject to Chilean laws and authority during a period of ten years counted from the ratification of this treaty.

At the expiration of this period of ten years a plebiscite will decide, by popular vote, whether or not the territory referred to shall pass definitely to the dominion and sovereignty of Chile or whether it shall continue to form a part of the territory of Peru. That one of the two countries which is chosen (by the plebiscite) to annex the Provinces of Tacna and Arica shall pay to the other country ten million Chilean pesos or its value in Peruvian soles.

A special protocol, which shall be considered an integral part of this treaty, shall establish the conditions governing the plebiscite and the details under which the ten million pesos shall be paid by the country chosen as master of Tacna and Arica (El pais que quede dueno de las provincias de Tacna y Arica.)

It will be noted that this treaty, so indefinite in general, is definite enough in the admission that Tacna and Arica are parts of Peru and that the provided plebiscite is to determine "whether or not the territory referred to shall pass definitely to the dominion and sovereignty of Chile or whether it shall continue to form a part of the territory of Peru."

Understanding of this whole question will, therefore, be greatly facilitated if there be put aside the arguments so often and so persistently advanced by Chile to the effect that the possession by her of Tacna and Arica is "by right of conquest," or that it is a "fait accompli," or that the fate of this territory is hers to decide both by right of victory and that of possession. The conditions which these arguments express are undoubtedly of great practical moment and in the absence of arbitration or intervention will probably become the factors having most influence in the ultimate determination of the fate of Tacna and Arica. But in any unbiased arbitration of the Tacna-Arica question, as Chile well knows, the power in whose hands the question is left for arbitration must undoubtedly rule that the question is an absolutely open one and that the answer must begin with an acceptance of the treaty of Ancon at its face value. If this be kept in mind it will explain much of the reluctance evidenced by Chile to leave the matter to the decision of an arbitrator.

Article III of the treaty of Ancon, in addition to its other shortcomings, provided material for a perpetual dispute as to the border of the Tacna-Arica territory, a dispute not yet settled.

The eastern border of the territory is given in the treaty as the Republic of Bolivia, but the international border between Bolivia and the Peruvian territory of Tacna and Arica was and is a more or less traditional one of very uncertain location. Thus the solution of the Tacna-Arica matter involves a settlement of this question of the border in addition to the main question of sovereignty.

The plebiscite directed in Article III should have been held in the year 1894, but that date found Chile engaged in a civil war and, in addition, effort on the part of the two countries to arrange the protocol prescribed in the treaty of Ancon had always come to naught because of inability to agree as to the conditions of the plebiscite. The long and fruitless discussions of these conditions which were held during the years from 1884 to 1894 were marked by two characteristics—insistence by the Chileans that only Chileans and foreigners should vote in the plebiscite and equal insistence by Peru that only Peruvians should vote. Details of this long discussion are uninteresting, and the discussion as a whole resolves itself into a technical bickering which is of no credit to either country.

Thus the matter drifted until 1910, when Chile proposed that the plebiscite be arranged on the basis of the vote being given to literate Peruvian, Chilean, and foreign males over 21 years of age who had resided in the Tacna-Arica territory for six months, and that the plebiscite be supervised by a commission composed of one Chilean, one Peruvian, and a third member chosen by the consular agents in Tacna and Arica. This plan did not appeal to Peru, as her population in the disputed territory is a laboring one and as a class is not literate. She declined the conditions and in the bitterness which arose between the two countries as a result Peru withdrew her lega-

tion from Santiago. The diplomatic relations thus broken have never been resumed, the correspondence between the two countries being handled through French diplomatic channels. The consular service was, however, maintained by both countries until November, 1918.

In 1912 Chile and Peru made another effort to come to an agreement and finally made an exchange of telegraphic promises, which is known as the Huneans–Billinghurst protocol. This provided that the plebiscite should be held in 1933, that all literate males who were born in or had resided three years in Tacna and Arica could vote, and that the plebiscite should be supervised by a commission of two Chileans, two Peruvians, and the chief justice of the supreme court of Chile. This so-called agreement was rejected by the Peruvian Congress and, in fact, never received effective ratification on acceptance in either country.

In December, 1921, the Alessandri Government proposed to Peru that the plebiscite arranged in the agreement of 1912 be held without delay and that it be governed by the conditions then imposed.

Peru replies to this note with a refusal to accept the Chilean proposal for a plebiscite and, indeed, a denial that there ever existed an agreement in 1912. She proposed to leave the whole matter to the arbitration of a friendly third power, preferably the United States.

The Peruvian reply of December, 1921, is generally held to be an able and just one and to have put Chile in a position from which she will have difficulty in escaping the acceptance of arbitration.

II. Resources and Economic Value of Tacna and Arica.

It is remarkable that in many discussions in the foreign press of the Tacna-Arica question there almost invariably creeps in a reference to the nitrate deposits in Tacna and Arica and the desire of Peru to possess them. There is no nitrate in the Provinces and little else of any value. The nitrate deposits of commercial value are in the Province of Tarapaca and Antofagasta, an area not in dispute.

The natural resources of Tacna and Arica were well expressed by Señor Mathieu, Chilean ambassador to the United States, when he said that "Chile and Peru disputing over Tacna present the spectacle of two bald men fighting for a toothless comb." Arica is a port of first importance to Bolivia and to Bolivia only. There are but 39,715 hectares in cultivation in the whole territory as compared with an area of 23,306 square kilometers. There is practically no rainfall. The mineral production is very small. The value of property was 68,299,544 pesos in 1917 as compared with 7,435,285,275 pesos for the whole of Chile. There passed through the port of Arica in 1920, 2,071,276 gold pesos worth of imports and 6,025,875 gold pesos worth

of exports as compared with 455,078,934 and 778,885,230 gold pesos through the other ports of Chile.

III. Population and Nationality.

The census of 1920 showed 38,912 people in the Province of Tacna, a density of population of 1.7 persons per square kilometer. How many of these are Peruvians it is difficult to say. There were, however, 12,052 in the whole of Chile in 1920 and by far the greater part of these are in Tacna.

At the first census following the acquisition of Tacna by Chile, that is in 1885, there were 29,523 people in the Province and practically all were Peruvians.

Peru has maintained, during all recent negotiations looking to a plebiscite, that a plebiscite has become impossible for her to accept because the Peruvian population of Tacna has steadily been diminished under Chilean control. She contends, further, that this diminishment has not been due to natural causes, but to pressure and persecutions on the part of the Chileans and directed against the Peruvian inhabitants. This contention is unfortunately true and its truth greatly weakens Chile's position in the whole Tacna-Arica controversy.

In 1907 there were 27,140 Peruvians in Chile and in 1920 there were 12,052. This difference is accounted for to some extent by the fact that many Peruvians came to the nitrate fields of Chile to work during the war period of 1915–1918 and later returned home when the nitrate industry practically ceased. But by far the greater part of the difference represents an enforced migration which took place in 1919 and 1920 and which constitutes one of the most disgraceful chapters in Chilean history. There were, in this period, anti-Peruvian riots in Valparaiso, Iquique, and Arica. The Peruvian consul in Iquique was forced to flee. The rioting in Valparaiso included looting of the shops of Peruvians and was of the most disgraceful character. A theater in Iquique in January, 1918, bore the sign "Dogs and Peruvians not admitted."

At present the population of Tacna is undoubtedly Chilean in the majority, and this majority would be increased in proportion in any plebiscite requiring literacy in those voting.

IV. Attitude and Interest of Other South American Countries.

A great many discussions of Chilean–Peruvian relations over Tacna and Arica become a discussion of Chilean-Peruvian-Bolivian relations. Bolivia, as a matter of fact, has no direct part in the controversy. She lost Antofagasta to Chile by the treaty of Ancon and the cession was complete and final. As a matter of practical politics, however, Bolivia will always throw her influence on the side of Peru.

at least as long as the present pro-Peruvian Government is in power. The claims of Bolivia for an outlet to the sea are not, however, involved in any way in the Tacna–Arica controversy as between Peru and Chile. It will be recalled that Bolivia's effort to get the League of Nations to consider her plea for a port was based upon the rather broad contention that the treaty of Ancon had now come under the class of treaties characterized by the treaty of Versailles as "inapplicable" and that her inability to obtain a port created a condition forming a "latent cause of international conflict."

Colombia and Ecuador have boundary questions with Peru yet unsettled, and Chile always counts these countries as pro-Chilean or, at least, anti-Peruvian.

The unknown factor in the whole of Chilean-Peruvian relations is, however, the Argentine. The Chilean Government has for some years made a studied attempt to cultivate Argentina friendship and claims to have succeeded in bringing the two countries to a more complete understanding than has existed in the past. The Argentines, however, took advantage of the Peruvian Centennial of last year to celebrate a love feast, the final act of this drama being the presentation to the Peruvian army of the horses of the Argentine cavalry squadron which was visiting Lima. There is no doubt that the Argentine greatly desires an outlet on the Pacific, a desire now the more important to her because of the discovery of great oil resources in the Jujuy-Salta region. She is now completing the gap in the railway between La Quiaca, Argentina, and Vyuni, Bolivia, which gives her a railway connection, but a very indirect one, to both Antofagasta and Arica. She is also preparing to build a line from Salta to Huitiquina, on the Chilean border, with branches to Boquete and Mejillones. Every argument, therefore, that Bolivia can advance for a Pacific port will probably receive the support of Argentina but Antofagasta, rather than Arica, would be the port of greatest advantage to these two countries.

V. Influence of Politics on the Peruvian-Chilean Differences.

The opinion is often heard, and it has much truth, that neither Chile nor Peru can afford to settle the Tacna-Arica question, since it furnishes the only convenient material from which the politicians of both countries are able to manufacture a war scare when the interior political and economic situation gets beyond their control.

There is no doubt that the question has time and again been made a political shuttlecock, nor that it would have long ago been settled, except for the partisan politicians of both countries.

Perhaps the most outstanding example of the kind of political maneuver alluded to may be found in the mobilization of the

Chilean army in 1920 when, to save a serious political situation involving a quarrel over the presidency and near revolution, a war scare with Peru was deliberately manufactured. This scare came to a climax in the mobilization of the army at an expense to an already bankrupt Government of 30,000,000 gold pesos and in the purchase from England of a dreadnaught which has proven an expensive luxury. From the viewpoint of preparedness the purchase of this dreadnaught has, however, given Chile absolute naval preponderance on the west coast of South America. There have been rumors that the Argentine intends soon to purchase or to build another battleship, and if this addition to her navy materializes it will cause Chile much suspense. The Argentine has long had a habit of strengthening her navy, or of talking of strengthening it, at every critical period in Chilean affairs.

The present President of Peru is anti-Chilean and undoubtedly has exploited the Tacna-Arica question in order to strengthen his insecure position. His actions have, however, had abundance of imitation on the Chilean side. Alessandri, the present President of Chile, has lately found himself at outs with all political parties, including his own. He is faced with the greatest deficit in the history of Chile. He has no hold on the Congress. He has been unable to carry out the reforms which constituted his campaign promises—perhaps no one could have carried them out. In November of this year he intimated his intention to resign, and just following this acknowledgment of political crisis the Chilean press began to revive the old differences with Peru. At about the same time it was evident that Chile would have to go into the foreign market for another loan. After the stage was all set the note of December 12 was sent to Peru. It was a weak proposal and an insincere one, since it attempted to revive the so-called agreement of 1912 which the Chilean Government well knew Peru could not accept. The note had, however, much of the desired political effect. Deliberations over Peruvian relations have enabled Allessandri again to get in touch with and to receive some support from the party leaders. The public mind has turned for the moment from high taxes, stagnated business, demoralized exchange, a growing deficit, inexcusable epidemics, and rotten interior politics. Peru's answer to the note was what was expected. She refuses acceptance of a plebiscite and proposes the United States as arbitrator.

Chile has long been disgruntled over the greater diplomatic finesse displayed by Peru in espousing the cause of the United States and the Allies against the central European States. During the war she made rather a point of virtue of the fashion in which she had maintained strict neutrality. She was and is pro-German, her political tone being given in a certain measure by the army officers—men trained in the German school and by German masters. She

was, during the whole war, a center of German intrigue and German activity. Following the defeat of Germany there has, however, been an outward change in Chile's leanings. It was with considerable bitterness that the politicians realized that they had backed the wrong horse while Peru, which had forcasted the trend of events more clearly, was high in allied approval. The politicians accused Peru of having embraced a cause in which she had no vital interest and merely to further her self-interest. The military group, after it had recovered somewhat from the blow to its *amour propre* found in the German defeat, began to seek a graceful manner of doing an *about face*. Officers were sent to the graduate military schools in America, England, and France. Two general officers were accepted from the English army as military advisers. Even Maj. Gen. Jorge Boonen Rivers, the most absolute of the pro-Germans, had a change of heart and translated Foch's "Principles de la Guerre" into Spanish. The whole situation bordered on the ludicrous.

VI. Possibilities as to Armed Conflict.

Neither Peru nor Chile is in financial position to make war and the Tacna-Arica controversy must therefore continue as nothing more serious than an acrimonious bickering. There is, however, always the possibility that either or both the countries may make war whether financially able or not since it has long ago been shown that between enemies equal in riches or in poverty the financial factor becomes relatively unimportant as far as concerns the ability to support a war.

Chile will always hold the key to the military situation. Peru might take the towns of Tacna and Arica by surprise, but she could never support an army of any size in that region as she has no railway connection to it except the long and indirect one by Lake Titicaca and La Paz. In other words, supply of a Peruvian army in northern Chile would have to be by sea and Chile's naval preponderance would not only prevent such supply but would enable her to carry on uninterrupted transport of her own troops.

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 4—1922.

15 APRIL, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1922.

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 4—1922—15 APRIL, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

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BRITISH ADMIRALTY REPLIES TO GEDDES COMMITTEE ON NATIONAL EXPENDITURE.

21 February, 1922.

The Geddes report has been the subject of much editorial comment and discussion in the daily press. There was much impatience and criticism displayed on the part of some of the papers and by the members of the various political parties in Parliament at the prolonged delay of over two months in publishing the report after the committee first submitted its findings to the Government.

According to the Admiralty, the committee, in order to obtain "a striking result," has recommended reductions which can not be made without seriously affecting the navy. The Admiralty's reply in part is as follows:

The Board of Admiralty fully recognize the need for the most stringent economy in the present condition of the national finances, and they have given most careful consideration to the interim report of the committee on national erpenditure. It was and is their earnest desire to adopt every economy suggested which may be practicable, always bearing in mind that they are responsible for seeing that effect is given to the naval policy of the Government announced to, and accepted by, Parliament, whilst the committee remain free from any such responsibility. The board's careful consideration of hte report has led them to two definite conclusions.

Firstly, the board recognize that the report contains several valuable suggestions, some of which the Admiralty themselves brought to the notice of the committee as being already under consideration, whilst others the Admiralty welcome and are adopting; but its major recommendations are based on a serious misconception of the character and requirements of our naval organization and the effect upon those requirements of our experience in the late war. This misconception is so complete as greatly to diminish the value of the report as the basis of practicable suggestions for economy.

Secondly, the very large reduction which the committee profess to have found possible in navy estimates without affecting naval policy has not actually been found at all. The committee recommend a total reduction of £21,000,000 additional to naerly £15,000,000. In 1921–22 the gross estimates (apart from £1,958,000 for beginning the capital ship program) were £89,228,000. Last summer the Admiralty

were able to recommend a reduction on this gross figure (apart from the £11,816,000 for new capital ship program) of £14,705,000, decided upon by the Admiralty in the summer. This reduction is declared to be irrespective of any reductions made possible by the Washington Conference, and of reductions that might be obtained by further delaying the provision of much-needed oil fuel reserves for the Fleet. Yet when the committee's recommendations are analyzed it is found that, even if viewed in the most liberal and unpractical light, they would not achieve a reduction of more than £14,000,000. The other £7,000,000 have no other apparent foundation than the general desire to obtain a striking result. Further, this discrepancy can not be explained by arguing that a superficial examination of proposed naval expenditure revealed £14,000,000 of superfluity, and therefore it can be fairly assumed that more minute examination would reveal another £7,000,000.

BREAKING ENGLISH NAVAL VESSELS.

7 February, 1922.

The following is the method of breaking naval vessels in Great Britain:

Old ships are sold to regular ship breakers. In the most recent sales the Admiralty has received from 20 to 30 shillings per ton for old ships. The top prices paid for old ships (when scrap brought about £9 per ton in 1919) were about £6 a ton for destroyers and £2 10s. to £3 for other classes of vessels. The destroyers brought more because the high-tensile steel in the hull could be used without remelting. The high-tensile rivet heads could be knocked off and the plates lifted out. The plates were then cut into convenient sizes with shears and sold to manufacturers of small tools, who could use this plate, it being from about 8 to 10 pounds, for stamping out a great variety of small hand tools, such as spanners, wrenches, etc.

The scrap of other vessels is melted down and to-day brings about £3 per ton if a market can be found for it. Armor plate is cut up by acetylene and sold as high-grade scrap. It brings more than the ordinary scrap, as it is used for the manufacture of automobile axles, etc., where high-grade steel is necessary.

The method of breaking used by ship breakers is ordinarily as follows:

The old ships are towed to some mud flat near a place where unskilled cheap labor can be obtained, and the ship is beached at high tide. They usually have some light-draft barge or vessel which is put alongside, and as the ship is broken the scrap is deposited on

this vessel for towing to some plant ashore, where it can be cut into small enough sizes to go into the furnaces for remelting. The breaking is very crude. The plates, beams, and frames are cut by acetylene in as large pieces as the derricks will handle. These are then placed on the above-mentioned light-draft vessel. It is necessary to have a plant ashore to cut this scrap into small pieces, and this is done usually by heavy shears, breaking hammers, and burning. It is stated that the equipment of the shore plant, which only does breaking, costs in the neighborhood of £20,000. This outfit consists of two or three big shears, the necessary breaking hammers, and burning facilities. It is not known just what it costs the breakers per ton to break up vessels, but it has been stated that one vessel, which was broken up on the building ways at Armstrongs in 1919, cost that firm about £2 per ton to break this vessel up on the stocks.

It has been very difficult to sell ships for breaking in the last few months on account of the low price of scrap, scrap being about £3 a ton, and the cost of breaking being so high that it hardly pays the contractor to undertake the job. It is understood that Germany is now going in for the ship-breaking business and is apparently able to make this pay at present because they are in a better position to dispose of the scrap. However, the Admiralty is finding great difficulty in disposing of old vessels and the general consensus of opinion in the Admiralty appears to be that it is about as cheap at present to take the nonferrous metal off of the vessel and tow her out to sea and sink her as it is to undertake to break her.

ENTRANCE AND SCHOOLING OF OFFICER PERSONNEL IN THE ROYAL NAVY.

Source: Lieutenant W. S. Green, R. N.

17 February, 1922.

Lieut. W. S. Green, of the Royal Navy, recently delivered a lecture before the officers at Portsmouth Dockyard on the subject of the training of officer personnel for the Royal Navy. Summarized, it may be condensed to the following points:

"As regards officer personnel for the Royal Navy there are two methods of entry: One, the cadet enters through Osborne at the age of about 13 years, and the other from the public schools at the age of about 17 years. The cadet entering Osborne at the early age is given a series of terms of schooling in general educational subjects applicable to boys of 13 years of age, and, as they progress in the general education, which is admittedly not as thorough as the public schools, they take up the subjects of professional education, such as engineering, mathematics, navigation, seamanship, and ordnance and gunnery. From Osborne the cadets go to Dartmouth, and advanced

work is carried out. From Dartmouth the cadet goes to the training cruiser and thence to seagoing ships. This is now modified, for, since the war, Osborne College has been closed down, and cadets enter Dartmouth direct for a course of 11 terms.

"Cadets entering from public schools are limited to 15 a year. Each is given an entrance examination on subjects of general education and goes direct to H. M. S. *Antrim*, where he spends a year before going to sea in the fleet as a midshipman. The method of entry is by nomination from a board and competitive examination. Formerly the public-school cadet was given a course at Keyham, but this has been abolished and he now goes direct to H. M. S. *Antrim*. His work is entirely professional, and his general education assumed to have been practically completed in the public schools. At no point in the course is the Dartmouth product and the public-school product necessarily joined, but they might come together on board cruising ships as midshipmen. There has always existed some friction between these products, the one from the public school, which has the better general education, and the one from Dartmouth, which has the better naval education and which has the better naval spirit and a more inherent respect for discipline and constituted authority. Legally, there exists no difference or distinction in the matter or promotion of the midshipman from the public school and the midshipman from Dartmouth, but, as a matter of fact, there does exist a slight difference, depending on whether the senior officers having control in the individual cases are a result of the public-school system or the Dartmouth system, each unconsciously tending to favor his own system."

TEST OF "AVELINE" STABILIZER.

17 February, 1922.

An observer recently flew in the Farman *Goliath* equipped with the Aveline stabilizer. The equipment provided for both lateral and longitudinal control, but the longitudinal control was not cut in during the flight and opinion to date bears out the belief that this instrument is not satisfactory longitudinally.

The plane took off from Croydon aerodrome, and got about 1,500 feet altitude before cutting in the stabilizer. The air was rough up to about 1,200 feet, but smoothed out about that height, and the stabilizer did not have much to do, so it was difficult to judge its capacity, except that, in turning, it gave fairly accurate, although not absolutely correct, banks. It is doubtful, in its present status, whether the instrument pays its passage or not, the total weight being nearly that of a relief pilot, and, war conditions considered, it would apparently be more desirable to have two pilots taking watch

and watch on the controls than to have one pilot and the weight of a second pilot put in in the form of an expensive complicated instrument.

BRITISH ADMIRALTY RESEARCH COMMITTEE.

18 February, 1922.

A committee has recently been appointed to discuss coordination of the work of the various Admiralty chemical laboratories. It will consider the scope of all work now carried out at the various laboratories in the Admiralty service, and in its report will recommend changes to be made with due regard to the requirements of each department to avoid dissipation of energy, overlapping of duties, and unnecessarily different conditions of service.

BRITISH TRAINING ESTABLISHMENT CLOSED.

18 February, 1922.

Just before the Geddes report was published, the Admiralty, with a view to economy, decided to close, next July, the Indus training establishment for artificer apprentices. This establishment has been in existence with considerable success for 20 years.

Orders were issued, at the same time, to close Devonport signal school immediately, and all further signal instruction will be conducted in future at the Portsmouth school.

PROPOSED REDUCTION IN OFFICERS OF THE BRITISH NAVY.

Source: Manchester Guardian.

21 February, 1922.

A start is to be made on the reduction of the active lists of naval officers proportionately to the reduction of the fleet. It is already announced that the active flag list. which now comprises 92 officers in the several grades, will be reduced by 15, thus leaving a total of 77.

No statement has yet been issued about the various ranks of the military branch below flag rank or in the other branches of the service, but reductions are expected, exceeding in some cases the proportion of one-sixth by which the flag list is to be reduced.

The theoretical method of retirement is quite simple. In each grade there is an age for compulsory retirement, there is a definite period of "nonservice" which involves retirement, and there is a "qualifying service for promotion," so that if an officer's turn for promotion comes before he has qualified he can not be promoted, but is placed on the retired list.

These provisions, together with the comparatively wide powers which the Admiralty has reserved to itself, make it fairly easy to reduce the active lists. The experience of the past shows that at any time the lists can be weeded to any desired extent, either by making the period of "nonservice" shorter, by making the definitions of "service" stricter, or by offering extra inducements in the way of increased retired pay. The whole system is comparatively modern, for until the middle of last century there was no age for compulsory retirement and there was no limit to the length of time which an officer might spend on half pay.

It will have been noticed that one of the recommendations of the Geddes committee was that the Admiralty should not appoint officers to ships in order to allow them to put in their necessary time of service for promotion. No doubt an economy might be made in that way, but it is very much to be doubted whether it would be worth making. The navy is strongly of opinion that such action would amount to a breach of faith on the part of the Admiralty and would not make for the good of the service.

Yet it is impossible to say that the effect of the regulations always corresponds with the theory. A good instance of this may be seen in the present provision for the retirement of senior captains. Theoretically promotion to flag rank is by seniority, selection being the rule only in lower grades of the service. But in practice promotion to the active flag list is now by selection, for the regulations, in addition to the clauses about "age," "service," and "nonservice," now contain this clause: "Captains whom it is decided not to employ further after promotion to flag rank to be retired at Admiralty discretion on promotion to the rank of rear admiral."

In other words, an officer fully qualified for promotion to the active flag list may be compulsorily retired on promotion. The Admiralty has, in fact, after many vicissitudes got back to the position of 1747, in which year a list of retired rear admirals was first formed. Officers so retired were then spoken of as "yellow admirals," and the process of compulsorily retiring them was known as "yellowing."

The system was opposed at the time because it placed so large a power of selection in the hands of the Admiralty, and that power was so unpopular that it was dropped before the end of the eighteenth century and remained in abeyance for more than 100 years. Its recent reintroduction has failed to attract much attention outside the navy itself. The difference between the retired pay of a senior captain and of a junior rear admiral would amount to about £50 a year.

BRITISH COMMENT ON WAR DEBT.

24 February, 1922.

The following is a copy of an article appearing in the editorial columns of a recent issue of the Dundee Advertiser, in reference to the payment of international debts. It is believed that the comments relative to the allied indebtedness to the United States will prove of interest.

The subject of international debts does not lend itself easily or naturally to the humorist, yet it has humorous aspects. We can laugh, for example, at the curious confidence that in the United States survives three years of disappointment in the reality of the European debts as a quarry from which to delve limitless quantities of money. Preparatory to the next congressional election, the politicians have put forward a gorgeous plan for awarding a bonus to every man who has worn the American uniform during the war—a bonus sufficient to compensate them for all they have lost by participating in national service. Congress likes it and is ready to stamp the plan with its approval. But it will cost a colossal sum of money, and the country already considers itself grossly overtaxed. Bearing that fact in view, the President has let it be known that he will veto legislation on the subject of the bonus unless Congress at the same time passes a tax law to raise the money. To the idea of passing a new tax the generous politicians manifest the utmost repugnance. But some of them have been seized by the happy thought—there are those European debts, ten thousand million dollars—why not demand prompt repayment and use that to pay the bonus? We do not suppose that there are many well-informed public men in America who believe for a moment that the foreign debts are a mint to draw upon at will, but the favor the notion finds in the popular mind shows how very small a distance the popular imagination carries when it deals with other countries. The case may be put thus: America, now the richest country on earth, wants, say, ten thousand million dollars to distribute among its returned soldiers. But it is overtaxed and can not think of raising the money by taxation. Nevertheless, it is quite an acceptable proposition that it should be raised by certain other countries which are in a state of poverty and whose taxation is incomparably heavier than that of America.

Another humorous aspect of the subject is furnished by certain very downright remarks on the subject of the debts by M. Louis Loucheur. They display the astonishing difference that it makes in a man's expressions if he is or is not an official. A month ago Mr. Loucheur was a leading member of the French Government, and while he remained a member, wild horses, we suppose, would not have drawn from him an expression which could be construed as meaning that France would ever, in any circumstances, repudiate her debts to other nations. He displayed with correctitude what is the official position in all well-behaved countries—the position so touchingly maintained through many years by the Republic of Liberia of paying no interest on its debt, but annually acknowledging in the politest way that, though unpaid, it was due. But when M. Briand fell, M. Loucheur also went out of office, and now he talks, not like an official, but like a man. And this is what he says: "You (America) misunderstand the elemental facts of Europe. You ask us to pay our war debts. We can not pay now, and we can not pay ever. No clear-headed man with a real knowledge of financial facts has the remotest idea that we can

ever pay." And he goes on to show why it is impossible. America won't take French goods, and is reinforcing her tariff to make doubly sure of it. She won't take French currency, and demands gold. But she herself possesses most of the gold in the world and a call upon what remains. "How utterly illogical." exclaims M. Loucheur, in these circumstances, to think that the debt can ever be paid. Yet if M. Loucheur as a member of the Government had spoken in this fashion there would have been a crisis. Perhaps in the Loucheur lecture to America we may find some inner light on the Loucheur-Rathenau agreement. All that he says of the situation as between France and America applies to the situation as between France and Germany. His beliefs about the possibilities in the one case can hardly fail in his logical mind to be his beliefs in the other. Did he conclude the Rathenau agreement for the payment of part of the reparations in selected goods to be directly used in the devastated area because he believed that that was all the reparation on which France could absolutely count? In France there are even more things than in Britain that a politician dare not say.

Perhaps, however, we have no right to wonder at the slow progress made by American opinion in recognizing the impossibility of the international debts. Is there any power in the world capable of drawing from Mr. Lloyd-George his real opinion on the related subject of the German indemnity or even of getting him to admit that his opinion on it has ever undergone any change? Well, perhaps a general election which landed him, like M. Loucheur, in a position of greater freedom and less responsibility would do it. Nothing less will. Lord Buckmaster deals with this subject in an amusing letter in the press. Last week the Prime Minister very tartly accused Mr. Hogge of being "as usual inaccurate" in saying that, during the general election, he had announced that a cabinet committee had reported that Germany would be able to pay the whole cost of the war, estimated then at £24.000.000.000 ($166.796,-000.000). But the usual inaccuracy is the Prime Minister's, for here are Mr. Lloyd-George's words as unearthed by Lord Buckmaster from the Bristol speech:

"Let me summarize. First, as far as justice is concerned, we have an absolute right to demand the whole cost of the war from Germany. The second point is that we propose to demand the whole cost of the war. The third point is that when you come to the exacting of it you must exact it in such a way that it does not do more harm to the country that receives it than to the country which is paying it. The fourth point is that the committee appointed by the British Cabinet believe that it can be done."

The pose is still that he thinks now what he thought then, though the fact, admitted in the House of Commons two months ago, that "the amount received up to the present by the British Empire from Germany is not yet sufficient to cover the cost of the British Army of Occupation on the Rhine," suggests the need of a pretty complete revision of thoughts, or, what is equally hard to get, a very complete acknowledgment of failure.

BRITISH ANTI-GAS TRAINING.

23 February, 1922.

An anti-gas school has been formed at the royal naval barracks, Devonport, and was opened in the middle of February, 1922, for instruction.

The school is situated on the north side of the gunnery school and is under the superintendence of the captain commanding the gunnery school. A lieutenant commander, appointed to the *Vivid*, is in charge of the gas school and is superintendent of the anti-gas training.

The anti-gas school at Portsmouth has been closed.

With a view to disseminating knowledge of antigas measures throughout the service, officers and men are ordered, from time to time, to Devonport Antigas School to undergo a four and a half days' course. Ratings are selected from all classes, but must be of superior intelligence with qualifications as instructors.

BRITISH TORPEDO PLANE.

21 February, 1922.

Information has reached this office that the Air Ministry has placed an order for two torpedo-carrying planes on a design submitted by the Blackburn Aircraft Co. This design is worked around the Napier "Cub" engine, which is a 1,000 horsepower. The plane will be designed for long range and to carry a 21-inch torpedo weighing something over 3.000 pounds. The Handley Page Co., which was in the original competition for torpedo plane with the Blackburn Aircraft Co., have not yet been able to deliver their competing plane; in fact, have not been able to finish it, so it has not been tested and has not seriously competed with the Blackburn, which is at present undoubtedly favored by the Air Ministry for the 18-inch torpedo.

BRITISH MOTOR LINERS.

Source: Reliable.

2 March, 1922.

The adoption of motor ships of exactly similar types by different shipowning firms is one of the most interesting developments in connection with the new system of marine propulsion. Such a policy has not been common with steamers, but it is being followed with oil-engined craft on account of the reduction in the cost of construction that is thereby secured. A good instance is afforded in two new motor ships which were completed last month. Both are of 14.000 tons dead weight, and thus represent the maximum size of vessels of this class yet built. One is the *Lochkatrine*, built for the Royal Mail Steam Packet Co. by John Brown & Co., Clydebank, and the other is the *Glengarry*, a product of Harland & Wolff's Glasgow yard. Both vessels were designed by Harland & Wolff and form one of the standard classes developed by that firm during the past two or three years. The only difference in the two ships is that in the

Lochkatrine there is a larger amount of refrigeration space, and the necessary provision has been made for it.

As the largest and highest powered oil-engined ships afloat, these vessels are of more than ordinary interest. They are 502 feet in length, with a beam of 62 feet, and it is computed that they carry approximately 5 per cent more cargo than steamers of similar dimensions. The twin-screw machinery has an output of 6,400 horsepower and, including the four 150-horsepower Diesel engines coupled to electric generators, there is a total Diesel installation of 7,000 horsepower. The eight cylinders, 740 millimeters in diameter, are the largest built commercially, although four-cycle engines of the same type will shortly be constructed with 4,000 horsepower in eight cylinders. Builders of this class of motor are confident that even higher powers will be reached, but the general impression among Diesel engineers at the present time is that for plant above about 3,500 horsepower the two-cycle principle will probably be adopted in the future. Machinery of equal power and somewhat similar to that in the *Lochkatrine* and the *Glengarry* is installed in the Elder Dempster motor passenger liner *Alba*, which was recently placed successfully in commission. In this ship it is found that with a speed of nearly 13 knots the fuel consumption is between 20 and 21 tons per day.

BRAZILIAN BUDGET.

1 February, 1922.

The President of Brazil, on January 24, 1922, vetoed the entire expenditure budget for the year 1922 which was passed by the Congress which adjourned December 31, 1921. This action eliminates all appropriation bills for the maintenance of the various departments of the Government for the current year. As no constitutional means are provided for continuing former appropriations in such a case as this—which now happens for the first time in Brazil's history—the President will convoke Congress in special session to pass new appropriation bills. The reason given by the President for vetoing the budget is that its provisions—many of them unconstitutional—would entail for the current year a minimum deficit of 360,000:000$000 ($45,000,000 at present exchange). This deficit is equal to 36 per cent of the estimated revenues of the country for the year, and in the history of this country actual revenues usually fall below the estimates.

So far as the navy is concerned, this action wipes out the 100,000:000$000 appropriated for new construction. It also eliminates the increase of pay for the naval forces which was granted by the appropriation bill. It is too early as yet to predict what the ultimate result on the navy will be; that is, whether a new bill

will be as liberal as the one just passed. It is likely not to be so, in view of the former stand taken by the President in favor of economy.

BRAZILIAN ENGINEERING PERSONNEL.

1 February, 1922.

It is hard to get Brazilians into marine engineering work. The ranks of the commissioned officers are short and there is chronic difficulty in obtaining enlisted men. The former condition may be partly due to the lack of regard of those in authority for the engineer officers; the latter condition is due to the dislike of men for the fatiguing duties of firemen and engineers in tropical climates.

The blight of lack of funds shows plainly in the engineering field. Spare parts do not exist, stores are doled out with a miserly hand and such a thing as regular overhaul periods is almost unknown.

In spite of all this the officers of the line give high praise to the engineer force of the ships for the good results they obtain notwithstanding such severe handicaps. When they are permitted to put their machinery in good shape, they produce excellent results. The *São Paulo*, after her return from the United States, made four trips across the Atlantic between Rio and Europe at a speed of 15 to 16 knots and had no difficulties. Nearly all the other ships are old but yet can steam in most cases at speeds little below their contract speeds. Most of the trouble that exists is due to worn-out boilers.

CHINESE POLITICAL PARTIES.

23 January, 1922.

No person living in China, whether he be a diplomat, sailor, soldier, business man, or student, can ever succeed in his profession unless he makes a study of Chinese politics.

In any well-ordered modern State it is possible to make a separate study of military, naval, political, and commercial conditions and to write reports upon them which will be complete in themselves and yet will not overlap. In China this is impossible. One can not study military affairs without becoming involved in the intricacies of Chinese politics, because the military leaders are the leading politicians and their movements and counter movements are dictated by their political opportunities. Every public question in China is military-political. A man can undertake no more either in reform or in self-aggrandizement than he can back up by military force. No political party is stronger than the military backing which it can enlist and pay.

No student of Chinese military affairs can ever guess at the future movements of any given commander until he knows what his political affiliations are and what his political ambitions are. Armies in China are not designated to repel outside aggression nor to preserve internal peace; they are enlisted and maintained to keep the commanding officer and his friends in positions of power and comfort, to forward his ambitions and to balance the military power of possible rivals. The history of a year's politics in China would read like the history of any principality in Europe in the twelfth century, only with less real fighting and more intrigue; the men enlisted and engaged join and fight for a living, not for a cause. Politics are without policy and internal wars are inspired by no motive but the gratification of personal ambition.

For these reasons one can not study Chinese politics as one studies party politics in any first-class occidental nation. Nor can the Chinese army be studied as a national army backing a national policy. It must be known according to its numerous integral parts and these must be studied through a knowledge of the personal politics of the leaders who command the loyalty of their men through paying and feeding them.

Every military attaché who has arrived in Peking in recent years has gone through his predecessor's files and announced that all that had gone before had been sidetracked by politics, but that he would adhere to his particular business and study the army. And every one has concluded after six months' residence that he had observed enough of Chinese military tactics to last a lifetime and that if he ever hoped to understand what the army was doing in China he had better understand military politics. The national army does not any longer exist in China. To know what is going on one must understand the alliances and enmities existing between the military governors who control the various hordes of armed coolies that go to make up what we call the Chinese army—and this is also the essence of Chinese politics.

The Chinese Navy is now split into several factions, subservient in each case to local military groups, and the movements of the navy are dictated as much by factional politics as are those of various divisions of the army. The ports and trading centers are all under the domination of politicians with military titles, and these are in turn frequently under the control of bigger men who sit astride of railways or other means of communication in the hinterland and dictate policy according to their personal whims. To know the navy one must know Chinese military politics, and to know the ports one must know who controls them and what his affiliations are to guess at what would be likely to happen in any given district in the event of

international affairs intruding themselves upon Chinese feudal politics.

For very similar reasons trade and industry are by no means independent of military affairs. The military lords maintain themselves and their followings out of local taxes, or rather exactions. The more soldiers a man enlists the heavier the burden imposed upon trade and industry. Where there is occupation by alien troops or incessant fighting there is naturally little or no business. In times of peace the only man who can conduct a business at sufficient profits to attempt to expand is the man who can do it so inconspicuously that his enterprise attracts no official attention, or the man who can enlist official capital in his business and with it official protection.

Because a certain district produces cheap wheat in abundance and is blessed with unlimited water power is no sign that it is a good field for the erection of flour mills. One must first learn if there is to be continued peace in the district, then how much the local military and civil officials are likely to tax the enterprise, how influential are the local merchants with whom one expects to deal, how heavy the transport exactions will be, and how much either official protection or immunity is likely to cost. To know all this one must know local military and political conditions thoroughly.

And so it goes with every other branch of investigation in China. The man who studies any line without taking the armed official element into account is ignoring actualities and is always in great danger of reporting that which interests him as it ought to be rather than as it really is.

CHINESE GOVERNMENTAL ACTIVITIES.

The following daily news notes cover Chinese governmental activities for the period from January 15, 1922, to February 7, 1922:

The Cabinet Situation (Jan. 16, 1922).

It is reported that through the good offices of President Hsu's envoy, General Hsu Pang-chich, who has been sent to Loyang to interview General Wu Pei-fu, the situation appears brighter. General Wu is said to have submitted a proposal to the Government involving the payment of one million dollars of the money promised him for military expenses before the lunar new year and a promise that Chang Shun shall not reenter the Government service. In case of General Hsu's failure to adjust the trouble, Wang Shih-chen will be asked to act as mediator.

To Protect Chinese in Vladivostok (Jan. 19, 1922).

At the urgent request of the Chinese residents in Vladivostok, Admiral Li Ting-hsin, Minister of the Navy, has resolved to dispatch

naval forces to protect them. Since all the naval forces are busily engaged along the Yangtsze River, Wang Chung-wen, Commander of the naval forces in the Three Eastern Provinces, has been authorized to send sufficient forces to Vladivostok.

Students Give Warning (Jan. 16, 1922).

Realizing that Liang Shih-yi is contemplating the appointment of Lu Chung-yi, ex-Director General of the Bureau of Currency and notorious pro-Japanese leader, as the Director General of the National Wine and Tobacco Administration, the Shanghai Students Union has addressed a warning to Lu advising him not to accept the appointment. It is said Tsao Yu-lin, another notorious pro-Japanese official, has also received warnings from the students.

President Drawn into Political Tangle (Jan. 17, 1922).

It is the intention of the President to keep clear of the present tangle but unfortunately he finds himself in the same predicament as Premier Liang Shih-yi. He has resolved to leave Liang alone in order to keep himself in a safe place without affecting his position. It is reported that the President will grant leave of absence to Liang Shih-yi.

Peking Students' Union Meets (Jan. 18, 1922).

The Peking Students' Union hoodwinked the police by holding a meeting on the 16th instant at the Peking National Teachers' College. Representatives of 16 schools were present and the following decisions were reached: (1) To oppose the redemption of the Shantung Railway with a Japanese loan; (2) To insist that the 21 demands should be brought up at the Washington Conference for settlement; (3) To oppose the reinstatement of Tsao Yu-lin and Lu Chung-yu; (4) To issue a declaration setting forth the failures of the present Cabinet.

Seizure of Salt Revenue by Navy (Jan. 17, 1922).

It is understood that the naval forces in the Yangtsze Valley have consented not to retain the incomes of the salt revenue in the two Huai districts on condition that all arrears of pay are cleared before the Chinese new year and that the naval expenses are remitted monthly henceforth.

Wanted: A New Premier (Jan. 18, 1922).

It is learned that General Wu Pei-fu will not cease his opposition to the Liang Cabinet unless it resigns. President Hsu sent three officials to Shiang Shan in the Western Hills to interview Mr. Hsiung Hsi-ling, an ex-Premier, and one of the Chinpu Tang leaders. As a result Mr. Hsiung immediately came to Peking to see the President, who offered him the Premiership. Mr. Hsiung consents to form

a cabinet provided the various Provinces will undertake to disband their superfluous troops.

Retrenchment Policy (Jan. 18, 1922).

In order to carry out the retrenchment scheme in the Provinces, plans have been prepared by Premier Liang which will be sent to the Provinces to be carried out by the provincial authorities. It is proposed that all civil expenses should be reduced by 20 per cent, military expenses by 15 per cent, salaries 30 per cent, and all other miscellaneous expenses 10 per cent.

Trouble in Yunnan (Jan. 18, 1922).

It is reported that ex-Tuchun of Yunnan, General Tang Chi-yao, has entered the Province of Yunnan with his troops in order to regain his former position. He is supported by Wu Hsieh-cheng and Yang Chun-fang and Tang Chi-yao will be made commander in chief and governor of the Province in case Ku Ping-chen, the present Tuchun of Yunnan, should offer to resign.

Premier Liang Still in Office (Jan. 19, 1922).

Premier Liang Shih-yi is still in office and has no intention of resigning. The vernacular press have already gave out the names of nominees for the next cabinet. Chang Tso-lin has telegraphed to Wu Pei-fu asking him not to create trouble before the Chinese new year and that Liang will resign after he has served his purpose. It is said that Wu's opposition may die down. The Premier is reported to have turned his whole attention to the task of raising funds to tide over the new year and arrangements have been made for the flotation of seven million dollars in domestic bonds secured on the salt surplus.

Arsenal Working Overtime (Jan. 19, 1922).

The Techow Arsenal has been ordered by General Wu Pei-fu to increase its staff for the manufacture of firearms and other military equipment. The arsenal is now running day and night and raw materials have been shipped from Shanghai to meet urgent needs.

Death of General Chiang Kuei-Ti (Jan. 19, 1922).

General Chiang Kuei-ti, the newly appointed inspector of the army and former Tutung of Jehol, died at his residence on the 17th instant. Before he expired he recommended that Pai Chen-yi, the acting commander of his troops, the Yichun, should be retained and that his troops be paid before the new year. President Hsu called personally at his residence to offer condolence to his family.

The Political Situation (Jan. 20, 1922).

Since the anti-Liang campaign arose the President has sent five emissaries to General Wu Pei-fu and other leaders in the various

Yangtsze Provinces to explain to them the Government's policy on the Shantung question, it is learned that the misunderstanding has been cleared up. It is said that the three delegates at Washington have wired stating that Liang has not asked to change their policy in regard to Shantung and that it is Japanese propaganda. Wu will propose certain terms for the Liang cabinet to carry out before he ceases his opposition.

Trouble in Szechuan (Jan. 20, 1922).

General Hsiung Ko-wu, ex-Tuchun of Szechuan, is not satisfied with the agreement concluded by General Liu Hsiang, commander in chief of Szechuan, with Hupeh authority and has instigated the troops under Lan Tien-wei and Pan Cheng-tao to appeal to arms. General Sun Chuan-fang, commander in chief of Upper Yangtsze Valley, has approached Hsiung Ko-wu asking him to abandon his militaristic policy.

To Reduce Army (Jan. 20, 1922).

The new Minister of War, Pao Kuei-ching, is planning to reduce the standing army. The maximum of national troops will be reduced to 800,000, whereas China to-day has over 1,300,000 men. The remainder will be organized into reserves.

Wu Pei-Fu's Message to the President (Jan. 23, 1922).

It is reported that Wu Pei-fu has sent a telegram to President Hsu Shih-chang hinting that he will sever relations with the Peking government and that another telegram was sent to the Diplomatic Corps indicating that Wu is taking means to deal with the situation. It is definitely known that Wu will not create any disturbance before the Chinese new year.

Detention of Salt Revenues (Jan. 23, 1922).

Admiral Li Ting-hsin, Minister of the Navy, is doing his best to clear up the situation created by the detention of salt revenues in the Yangtsze Valley by the Chinese Navy. Admiral Li has telegraphed to Admiral Chiang Chen at Shanghai warning him of the consequences and has sent two aides to the Yangtsze Valley with orders to prevent further interference.

Secret Alliance Between Wu and Chen (Jan. 23, 1922).

A Hongkong report states that Generals Wu Pei-fu and Chen Chiung-ming have recently entered into secret understanding and agreement which are supposed to contain the following seven clauses: (1) To stop the civil strife; (2) to organize a provisional Parliament; (3) to cancel the existing Southern and Northern Governments; (4) to establish an united mixed Central Government; (5) to form a formal Parliament; (6) to enforce formal election; (7) to reduce the national forces.

Provinces Against Liang Shih-yi Only (Jan. 24, 1922).

Two telegrams are reported to have been received from General Wu Pei-fu. They state that if Liang does not resign the signatories of the first telegram will sever connections with the Central Government. The telegrams suggest that there is no reason why Liang should not resign at once and that the resignation of the other Ministers of the Cabinet is not necessary until a new Premier had been found.

Sun Yat-sen's Favorite Scheme (Jan. 24, 1922).

It is now definitely known that General Chen Chiung-ming of Kwangtung is not in favor of the so-called northern expedition. Chen Chiung-ming has ordered the withdrawal of 75 yings of troops near the border of Kiangsi. About 700 workers in the Canton Arsenal have also been transferred to the Swatow Arsenal, which is under the control of his faithful follower, General Hung Chao-lin, with a view of eliminating the influence of Sun Yat-sen in Canton.

Ma Fu-hsiang Wants Salt Revenue (Jan. 24, 1922).

General Ma Fu-hsiang of Kansu has telegraphed to the Ministry of Finance, Chang Hu, asking permission to detain $220,000 of the salt revenue to pay the troops under his command before the Chinese new year. Chang Hu has sent a reply to him asking to refrain from interfering with the salt revenue for fear of foreign intervention.

The Political Situation (Feb. 3, 1922).

Premier Liang's leave of absence terminated a few days ago and the President has granted him another ten days' extension. General Chang Tso-lin stated that since it is the demand of the people that Liang should resign, it is advisable for the government to select another Premier, and in the meantime Dr. Yen will take charge.

Navy Insists on Payment of Salaries (Feb. 3, 1922).

The conditions imposed by the navy for the release of the salt junks in the Yangtsze involve the payment by the Government of $200,000. The Government will shortly send an appeal to the provinces for contribution in order to make up the balance of the arrears due to the Yangtsze squadron.

Kiangsi Province to Help Redeem Shantung Railway (Feb. 3, 1922).

Tuchun Chen Kwang-yuan of Kiangsi has telegraphed to the Government stating that the Kiangsi people will contribute $2,000,000 to the fund for the redemption of the Shantung railway. He also stated that the people everywhere showed great enthusiasm over the project. General Chen also called attention to the necessity of redeeming the railway and of showing the appreciation of China for the support given her by the friendly Powers. He requested

that the action of Kiangsi province be reported to the Ministry of Foreign Affairs and through it to the delegates at Washington.

Opium Smugglers Shot (Feb. 6, 1922).

It is reported that the military court of the inspector general of Hupeh and Hunan has proofs that Fan Hung-hsiang and Wu Pei-mei, aides-de-camp of General Wu Pei-fu, and Chu Chin-sun, head of the secret service detectives, and Liu Hai-ching, a former detective, were guilty of smuggling opium and death sentence were passed. Instruction was received from General Wu Fei-fu and they were shot on February 4.

Tuchun to Settle Payment of Navy (Feb. 6, 1922).

General Chi Hsieh-yuan, Tuchun of Kiangsu, has arranged a commission to settle the matter of providing funds for the Chinese Navy at Shanghai, and representatives of the navy have been invited to attend the meeting of the commission. General Chi proposes that $700,000 should be allocated monthly from the salt revenues for the expenses of the navy.

Troops Along the Peking-Hankow Railway (Feb. 6, 1922).

According to the report of the station master at Chengchow, it is estimated that eight-tenths of the Chihli forces in the Yangtsze Valley have returned and have been distributed along the Peking-Hankow Railway. Two full army divisions are said to have been stationed at Loyang while five brigades have been dispatched to the important stations of the railway to be on guard for any emergency.

To Start Work on Hulutao Harbar (Feb. 7, 1922).

Mr. Yeh Kung-cho and General Chang Tso-lin have petitioned the President urging the necessity of proceeding with the work on Hulutao Harbor works for which funds have been prepared. The President referred the matter to the Ministry of Finance, the Waichiao Pu and the Ministry of the Navy for consideration.

Hanyang Arsenal Unpaid (Feb. 7, 1922).

It is said that the Hanyang Arsenal is no longer under the control of the War Office which has not paid the arsenal for more than nine months. An agreement has been reached between Tuchun Hsiao, General Wu-Pei-fu, and the Central Government to the effect that the arsenal will henceforth be put under the direction of the provincial authority and be paid up by the Province of Rupeh.

Exodus of Fengtien Military Officers from Peking (Feb. 7, 1922).

During the last few days there has been a constant exodus of Fengtien Military officers from Peking, culminating in the departure of General Chang Ching-hui and General Chow Fen. They are responding to the call of their chief, General Chang Tso-lin, to

attend a conference at Mukden to discuss the political situation. The Chihli faction is said to be paying much attention to the movements of these Fengtien officials, having detailed special intelligence officers to cover them.

SITUATION IN CUBA.

Source: Military Intelligence Division.

28 February, 1922.

The Political Situation.

Capt. Emilio Sardinas has been nominated as candidate of the Conservative Party for governor of Havana Province. His nomination was made on the 22d of February by the municipal executive committee of the Conservative Party.

Havana Province is normally Liberal, and under ordinary conditions would be carried by the Liberal candidate, but in view of the fact that the parties have been greatly disrupted by the recent amendment to the Crowder electoral law, it is too early in the campaign to forecast the provincial elections which will be held next November. Certain combinations which have not yet been effected are very likely to occur, and will most probable cause considerable political upheaval.

The two candidates for the Liberal nomination for mayor of Havana are having a partisan struggle to obtain that honor. The Havana municipal executive committee of the party is controlled by Congressman Martinez Alonso, who is running against Don Marcelion Diaz de Villegas, the present incumbent, and it is charged that the latter is discharging employees friendly to his opponent, using his present municipal office to further his own interests against his rival.

American Commission.

A commission of bankers, headed by Mr. Charles E. Mitchell, president of the National City Bank of New York, recently made a tour of the island for the purpose of inspecting the holdings of that bank in Cuba, and also get a good idea of the business conditions generally. The impressions gained by the commission, as expressed by its president, will undoubtedly be of great benefit to the island.

The announcement by Mr. Mitchell that the Cuban business outlook is improving, and that the National City Bank, which is now administering such large sugar interests on the island, intends to return the properties to their original owners after they again become solvent, has created an excellent feeling and will undoubtedly go far toward offsetting the effects of the inflammatory speeches recently made by certain unreliable politicians in the Cuban Congress.

Mr. Mitchell stated, at a largely attended luncheon given to his commission yesterday, that if Cuba would hold the respect and confidence of the financial world, she must "put her house in order"; that she must legislate wisely, enforce her laws as enacted, and must have economical and highly intelligent and honest political and commercial administration. That with these things assured her future is very bright.

Keen observers are unable to see how any hope can be entertained for obtaining these results, under the conditions now confronting the political world in the Republic.

Domestic.

The contract completing the $5,000,000 loan to the Cuban Government was signed by President Zayas on the 23d of February. The American banking houses participating in the loan are as follows: J. P. Morgan & Co., Kuhn, Loeb & Co., National City Bank of New York, Guaranty Trust Co. of New York, Bankers Trust Co., J. & W. Seligman & Co., Harris, Forbes & Co., Dillion, Read & Co.

The terms of the contract strictly prescribed how the money so loaned shall be applied. Provision is made: (*a*) For covering the Cuban debt to the United States for postal money orders; (*b*) to cover the interest and amortization due on Cuban foreign debt up to within three months of this date: (*c*) the remainder to be at the disposal of the Cuban Government to cover checks issued by it prior to May 20, 1921, and still unpaid. There is also a provision in the contract for taking up the loan now made, with the proceeds of a new projected loan not to exceed $50,000,000. The contract states this larger loan will be made as soon as the necessary legislation has been put through the Cuban Congress to complete the required readjustment in the budget, internal revenue, and the taxes.

The concertation of this loan has caused wide comment in the Cuban press and among the public in general. That portion of the Cuban press opposed to the present Administration point out the "humiliating" terms of the contract, and claim it is an open acknowledgment of bankruptcy and financial unreliability on the part of the Cuban Government. The terms have been criticized as being harsh, but fair-minded observers agree that the money would not have been properly spent and the debts mentioned in the articles of the contract would not have been paid unless so required by the contract.

Attention is called to the fact that the President of Cuba, in a recent message to Congress, and also in previous public utterances, announced that he had suspended all effort to obtain the $50,000,000 loan. In view of this, and in view of the projected $50,000,000 loan being provided for in the fifth Article of the contract for the

smaller loan, enemies of the administration are ridiculing the President for the announcement he has made.

This small loan will insure the payment of a small portion of the debts now owed by the Cuban Government, but will by no means afford complete relief for the bankrupt condition of the national treasury.

For the purpose of meeting the expenses provided for in the new budget, and for payment of some of the heavy debts of the Cuban Government, the President of Cuba in a recent message to Congress recommended a law to be passed providing for a tax of 1 per cent on the gross receipts of all business concerns in Cuba. This project was the result of a study made by the tax revision commission headed by Mr. John Hord, of the United States Government, who has been assisting in this work.

This projected law has caused wide comment and has met with strong criticism both on the part of the press and the public. It is pointed out that the cost of living in Cuba is already higher than in any other country in the world, and that this increased taxation will not be borne by the commercial houses concerned, but will ultimately have to be met by the consumer. It is further pointed out that even though a large amount of taxation would become due to the Government by this measure, it would be impossible to make honest collection of the money. Attention is called to the failure of the Cuban Government to obtain any appreciable revenue from the 4 per cent tax on profits of business institutions, which has heretofore been a law. Dishonesty and laxity are generally assigned as the reasons for the small amount of revenue obtained by the Government from this source, and those familiar with the collection procedure believe that the matter of collection is the most serious and most difficult part of the taxation problem.

This proposed law will undoubtedly meet tremendous opposition in the Cuban Congress, and will cause great dissatisfaction with the public at large, in view of the fact that it will tend to increase the cost of living and will again give the profiteers an excuse for making their outrageous extortions from the Cuban public. However, the financiers who have studied the problem carefully are of the opinion that this is the best and only efficient method for obtaining sufficient revenue for running the Government during the present fiscal year.

Widespread complaint is being made on account of disappointed employees discharged in the different departments of the Government, to conform to the economies demanded by the readjusted budget. These complaints have been general, and charges have been made, with good foundation, that good employees of little influence, but who are efficient and faithful, are being turned off and incompe-

tent, corrupt, and fictitious employees are being retained on the pay rolls of the Government.

The situation is still marked by the public lack of confidence in the ability and honesty of the present Administration to solve the very difficult financial problems now confronting it.

While the economic situation appears to have made a slight improvement, the political situation, especially in regard to Government finances, is still in a most deplorable state.

Foreign.

An economic commission sent by the Belgian Government for the purpose of studying the economic situation in Cuba arrived in Havana on the 26th of February.

SITUATION IN EUROPE, THE FAR EAST, AND LATIN AMERICA.

Source: Military Intelligence Division.

4 March, 1922.

EUROPE.

Developments in Europe since the Cannes Conference have in a general sense combined to emphasize the Russian question as the outstanding issue in the European political situation. This tendency has become so pronounced as to relegate to a second place the German reparations issue, which in the present situation appears to owe a large measure of its importance to its bearing on the question of the exploitation of Russia.

In general terms, the agreement arrived at by Lloyd-George and Briand at Cannes for the solution of the European situation implied a formula for the exploitation of Russia through German industrial organizations financed by foreign capital. While it was evident that the formula was strongly supported by powerful financial groups in both Great Britain and France, it was also evident that in both countries perhaps equally powerful groups were opposed to it. Conservative and nationalist elements in both countries rejected a program which appeared to promise German financial groups and their international connections a dominating rôle in the economic rehabilitation of Europe, and which moreover seemed to imply the recognition of the existing régime in Russia. In France this reaction resulted in the overthrow of the Briand ministry, and in Great Britain in serious threats of secession from the government coalition, weakening the support of the Premier and forcing him to modify his position. In Italy, on the other hand, the reaction appears to have taken a contrary direction, as the new ministry headed by Facta gives every evidence of having a pro-German orientation.

The developments following the Cannes Conference seem to imply a definite rejection of the formula based on Anglo-French finance, German industrial organization, and Russian resources.

From the beginning of his ministry Poincaire has pursued the policy of ensuring the adhesion to the French program of the principal military powers of continental Europe. The common danger from the revival of Russian-German military power appears to have been the principal issue upon which these powers have been united. Through a series of conferences steps appear to have been taken to ensure unity of action among these powers with respect to the prospective economic conference.

Full information as to the result of the recent meeting of the French and British Premiers at Boulogne is lacking. However, it appears that agreement was reached to exclude the reparations question from the agenda of the economic conference. Moreover, the British Premier is reported to have agreed to extend the application of the proposed Anglo-French Alliance to include Poland. Expressions of representatives of the Russian Government indicate that the Soviet authorities interpret the outcome of the Boulogne Conference as unfavorable to their interests; this is particularly evident in Trotski's warning as to the necessity for preparedness for military action during the coming spring.

The general effect of reports received relative to the Boulogne Conference is to create the impression that the British Premier's attitude on the question of German reparations and relations with Russia have undergone an unusual transformation. Whether his modification of attitude on these questions has been accompanied by compensations in the Near East and Tangier reports made public do not indicate, but it does not seem unlikely that such has been the case.

According to Paris press despatches, the commission of French experts who are preparing the program for the Genoa Conference have under consideration a project under which the Ukraine, the Donetz Basin, and the Caucasus would be opened as concession areas for foreign capital.

This project is of especial significance in view of French interest in the Ukrainian separatist movement and in the Caucasus.

In view of the negotiations between the French Government and the Soviet authorities, it seems possible that the project to open up the Ukraine, the Donetz Basin, and the Caucasus to foreign capital may have been proposed as the price of Soviet recognition. It also seems possible that the project may have been discussed at the Boulogne Conference between the French and British Premiers. That an agreement to make the project effective has been reached between

France and Russia or between France and Great Britain is much less probable.

Making all due allowance for the Soviet Government's desire to create the impression that it is in constant danger of attack by Western capitalism, an analysis of the situation from the point of view of the Soviet War Ministry would seem to indicate that apprehension as to the possible imminence of military action is not entirely unfounded. While the various ententes which are being reached by the powers on Russia's western borders appear to be entirely economic in character, they all have nevertheless especial reference to Russia, and it is not impossible that given a suitable opportunity they are capable of transformation into military undertakings. Large-scale military operations on the Russian border would, moreover, give France an opportunity to open up a line of communications across Germany under cover of the necessity of reinforcing her Allies. France would thus be enabled not only to effect a virtual intervention in Germany but also to complete by military occupation the corridor formed by the weaker states of Central and Eastern Europe who are now dependent upon her for support.

British Empire.

The announcement on February 28 of the abolition of the British Protectorate and the recognition of Egypt as an independent sovereign State is one of the noteworthy developments of the week in the affairs of the British Empire. This is the result of the consultations for which Lord Allenby was summoned to London last month. He is known to have favored the more liberal proposals of Lord Milner, published in 1920, rather than the recent Curzon proposals of November 10, 1921, which were rejected by the Egyptian delegation. Sarwat Pasha has expressed his satisfaction with the recent declaration and has consented to form a cabinet. Consequently the whole question seems to be back where it was a year ago, with fresh negotiations to be entered upon on a basis practically the same as the Milner proposals.

In the meantime martial law is to be withdrawn as soon as the Egyptian Government passes an act of indemnity, and, pending the outcome of further negotiations, the British Government reserves control of the following matters:

1. Security of the British Empire communications.
2. Defense of Egypt against all foreign aggression and interference, direct or indirect.
3. Protection of foreign interests in Egypt and protection of minorities.
4. Guarantees for British interests in the Sudan.

In making his announcement in the House of Commons, Premier Lloyd-George laid great stress on the fact of Great Britain's special interest in Egypt and stated that "His Majesty's Government would regard as an unfriendly act any attempt at interference in the affairs of Egypt by another power and they would consider any aggression against the territory of Egypt as an act to be repelled by all means at their command." This is evidently a "No trespassing" sign posted for the benefit of France and Italy.

Although by the agreement of 1904, France gave up all political interests in Egypt in return for similar action by Great Britain in Morocco, the attitude of France in regard to the Tangier question has aroused British suspicions in regard to French aspirations in northern Africa. Italy, moreover, has a large colony in Egypt to be protected and has been susceptible to Egyptian Nationalist propaganda in Rome.

The question of the abolition of the capitulations, which give extraterritorial rights to foreigners in Egypt, will be one of the difficult problems to be worked out as a result of the abolition of the Protectorate. Greece, Norway, Denmark, and Portugal have already agreed to the suppression of the capitulations, Norway and Denmark with the proviso, however, that "Great Britain exercises in Egypt the control necessary to protect foreign interests." Opposition is expected from France and Italy and to a less degree from Holland and Belgium, but it is believed that they will eventually consent provided the protection of their interests is guaranteed by the continuation of mixed courts or some satisfactory substitute for them. The United States as well is awaiting information as to the fate of the mixed courts before agreeing to abolition of the capitulations.

This move by Great Britain, with its "hands-off" warning to France, marks another chapter in the struggle for supremacy now going on between these two powers; it is an answer to the French-Turkish Nationalist agreement and may certainly be counted upon to restore to some degree the waning British prestige in Mohammedan countries and to quiet some of the disorder in India. It seems likely, in view of Mr. Lloyd-George's statements a few weeks ago, that Great Britain's next step will be to effect a settlement of the Turkish-Greek question, with revision of the treaty of Sevres.

Another important result of the abolition of the Protectorate will probably be a reduction of the British troops in Egypt, which number about 12,000. This is of great importance in view of the coming reduction in the British Army, which, according to a speech by the Ministry of War on February 23, is to be cut down by 33,000, involving the disbandment of 24 battalions of infantry, 47 batteries of artillery, and 5 cavalry regiments. This step is being taken in

order to carry out the budget reduction recommended by the Geddes Savings Committee.

In Palestine. British proposals to set up an administration closely resembling a Crown Colony appears unsatisfactory to the Arabs, and in India more trouble appears imminent as a result of resolutions adopted on February 25 by the All-India Congress Committee which seem to violate Ghandi's agreement to discontinue the civil disobedience campaign.

Party politics in England are approaching a crisis and a revolt in the coalition over the question of the reform of the House of Lords has reached such proportions that Mr. Lloyd-George has threatened to resign.

THE FAR EAST.

Japan.

Special significance attaches to speeches before the Diet of the Premier and the Foreign Minister of Japan by reason of the reference they contain to three outstanding features of Japanese foreign policy. Japanese emigration, the Four-Power Treaty, and Japanese relations with Russia.

With reference to the direction of future Japanese emigration the Premier stated that "Japanese emigrants are by no means shut out to emigration to all parts of the wide world. Wide areas are still open. America is not a place to which we should go. In South America to-day we are warmly welcomed. The foreign office authorities are dispatching persons to the places where we are welcome, and it is aimed to establish banking institutions there also."

In regard to the Four-Power Treaty and the Anglo-Japanese Alliance, Count Uchida, the Foreign Minister stated that "during the war great changes took place in the relationship between England and America, and between Japan and America; consequently, in connection with the disposition of the Anglo-Japanese Alliance, consideration had to be paid to America. In the Washington Conference something was discovered to take the place of the alliance. In other words, it may be said that the spirit of the Anglo-Japanese Alliance was transferred to the Four-Power Agreement."

Referring to Russia, the Foreign Minister foreshadowed possible entrance into relations with the Bolshevist régime in the statement that, "there is practically no country to-day that has recognized the communistic system of Moscow. Of course a great change has taken place in Moscow's own attitude. As a matter of fact, Moscow may be regarded as having abandoned communistic principles. I expect that it will not be long before we are in relations with Moscow."

In regard to the occupation of Sakhalien, the Foreign Minister stated that: "At a future date, when a legitimate government is estab-

lished, and when we enter into negotiation with it (Russia), careful attention will be paid with the idea of being able to protect fully the rights acquired by our people at the time of its occupation."

According to Associated Press telegrams from Tokyo, February 27, the Japanese Foreign Office has announced that the Japanese Government has decided to discontinue forthwith the work of fortifications now being constructed in the Bonin and Amami Oshima Islands, and to maintain the existing fortifications and naval bases at Formosa and in the Pescadores in the status quo. This action is in conformity with Paragraph 19 of the Five-Power Naval Agreement.

An internal political development of considerable importance is constituted by the defeat in the Diet of the bill providing for universal suffrage. The minor political parties with the assistance of the Kenseikei, the strongest opposition party, presented the bill for universal manhood suffrage in the Japanese Lower House, and pressed for a vote on February 28. At the same time large public demonstrations were taking place in the grounds surrounding the Legislative buildings, and several thousand police were sent to control the crowds. The measure was defeated by a vote of 243 to 147. Under the present law, Japanese male subjects paying $1.50 in taxes and over 25 years of age, may vote. The number of qualified voters is about two million and a half, while the total number of males over 21 years of age is about sixteen millions. Universal suffrage has been a live issue for years, and on the last occasion, three years ago, when a measure was pressed, the electorate was practically doubled. It seems fair to assume that under continued pressure further increase in the number of eligible voters will be obtained by more liberal laws, though universal suffrage is probably many years in the future.

China.

The condition of the Peking Government goes from bad to worse. It may be said that, for all practical purposes, the Government is not functioning. The President, who is politically isolated, is unable to persuade anyone to accept the premiership. The treasury is empty; and the payment of government officials is greatly in arrears. The Peking Government is relatively unimportant from a military standpoint at the present time, while General Chang Tso Ling, Dr. Sun Yat Sen, and General Wu Pei Fu are all maneuvering for position.

Numerous reports indicate that the troops of the Dr. Sun Yat Sen have left Kweilan in Kwangsi Province enroute to the Yangtse Valley via Changsha. Advance detachments are reported to have reached Hengshow, from which point supplies can be carried down the Siang River by junk to the railroad at Changsha. General Wu Pei Fu is reported to be concentrating his troops to prevent Sun

from crossing the Yangtse. Due to the menace of Chang Tso Lin in his rear, General Wu is said to be trying to shift the problem of defense against Sun to the shoulders of the governor of Hunan Province. If these reports prove to be reliable, they indicate that Sun is endeavoring to carry out his dream of gaining possession of the Yangtse Valley with Peking as the eventual objective.

With political conditions rapidly changing, rumors are being spread broadcast throughout the press. Of these rumors, the most common is that of dissension between Dr. Sun and General Cheng Chiung Ming, commander in chief of the South China forces. These reports are believed to be untrue today as in the past. Other reports are to the effect that Dr. Sun and General Chang Tso Lin have united for the purpose of crushing General Wu Pei Fu. These reports are believed to be of doubtful reliability. Dr. Sun has contended that the present Peking Government is controlled by Japan and that General Tso Lin is little more than a Japanese agent.

Dr. Sun is not friendly with General Wu Pei Fu and would probably like to see him crushed, but it is doubtful whether Dr. Sun would abandon his principles to the point of fighting as an ally of General Chang Tso Lin.

Siberia.

The delegation from the Far Eastern Republic reports as follows:

The troops of the Far Eastern Republic have captured Rozengartovka, 180 versts south of Habarovsk. A very interesting question has arisen in connection with the capture of cannon and rifles from the Merkuloff troops. The equipment captured is the same as some of that taken by the Japanese from the troops of the Vladivostok Government, when they disarmed the troops of that government on April 4–5, 1920. This is considered proof that the Japanese have armed and equipped the troops of Merkuloff. It is further reported that the Merkuloff troops used the armored train "Orlik" in fighting against the troops of the Far Eastern Republic. The "Orlik" was originally transferred by the Czecho-Slovak forces to the troops of the Vladivostok Government and was captured from the troops of the Provisional Vladivostok Government by the Japanese on April 4, 1920. It was turned over very recently by the Japanese to the Merkuloff troops.

Advices from Chita state that the Japanese are permitting the Merkuloff Government to ship away and sell much valuable property stored at Vladivostok.

Unconfirmed reports from Tokyo state that the representatives of Japan and Chita have reached an agreement at Dairen. Among other agreements reported to have been reached is that requiring the dismantling of the fortifications of Vladivostok. This report may or may not be true. It is believed certain, however, that the Far Eastern Republic will eventually be forced to reach a compromise with the Japanese.

Through possession of Siberia's only outlet to the sea, Japan is in a position to force a compromise that will seriously impair the "Open door" in Siberia.

LATIN AMERICA.

Mexico.

One of the best informed sources of information available states in substances: "There has been evident, especially during the past few days, a very obvious increase in a sort of suppressed local feeling that 'something is liable to happen soon.' There is no question that, whether or not with good cause, the administration is apprehensive of trouble that may take the form of serious revolutionary disturbances. Reports from various sources and localities indicate an increase in unrest and in the minor revolutionary activities that have been reported from time to time. There is a pronounced indication of increased activity in troop movements, trains are being more generally and more heavily guarded. The whole atmosphere is one of rather 'apprehensive waiting.' This atmosphere is reflected in increased timidity on the part of banks and other business concerns to involve themselves in further commitments of any kind involving use or local tying up of funds. A number of very significant incidents along this line have been noted recently. Many persons who are in a position to understand the gravity of the situation seem to be making an effort to dispose of their property, but are very careful not to disclose the reason for their desire to sell. President Obregon seems to be willing to go a long way to obtain recognition by the United States, and he does not appear to be in favor personally of the more radical policies of which his administration is the sponsor. However, he does not dare openly to oppose General Calles and the other radical leaders. Should he do so, Calles could at once paralyze all Government activities (railroads and other utilities), etc., by bringing about a general strike, and if the administration attempted to meet such a situation by the use of troops (the only way it could be met), open revolution would follow, led by Obregon's present advisers. Calles's ambition, his radical policies, and his hold on labor are unquestioned. The present situation may blow over temporarily, as worse ones have done before in Mexico. But there is believed to be quite a possibility of serious disturbances in the future. Should they come, they are apt to come suddenly—some sort of 'Caurtelazo' (troop mutiny) or coup d'état, such as, in the past, overthrew Madero, Carranza, and others. It by no means follows that the resulting situation would from the standpoint of the United States be any improvement on the present one."

One of the most significant occurrences of the last week was the appearance on March 1 of an article signed by Felix Palavicini in the Mexican newspaper El Universal. Señor Palavicini indicates the possibility and feasibility of meeting the demands made by the United States upon which the matter of recognition rests. He also states that Obregon can save his government "by disciplining the State governors, by setting at rest all doubts regarding property legitimately acquired, and regarding religious faiths, by admitting the urgent need of satisfying all Mexican and foreign interests affected by 'badly interpreted laws erroneously applied,' and by reassuring foreign Governments that their nationals are safe in Mexico."

Salvador.

The situation in Salvador is reported as being acute. The revolt of the 54 cadets of the military academy on February 17, and their flight to Chaletanago, on the Honduran border, contains the possibility of international complications. Conditions have been very much disturbed for some months over the question of the federation of Central America. The "Unionists" in Salvador (the "outs") were vitally interested in the success of the federation, which would have put an end to the unpopular Melendez-Quinoista régime (Government party, the National Democrat). The Unionists were being secretly opposed by the Government, although openly the Government fostered the federation idea. After the collapse of the federation, caused by the change of Government in Guatemala, and the withdrawal of the new Guatemalan régime from the federation, the Salvadorean Assembly issued a decree restoring the republic to the status of a sovereign State, thereby assuring the continuation of unpopular Melendez-Quinoista régime. This situation, together with the tense economic conditions prevailing in the country, has caused a political upheaval, and martial law has been declared. A certain uneasiness has been manifested in Salvador and Honduras for some time due to the failure of the federation, and the customary rumors of revolutionary attempts, which had disappeared during the formation of the Union, are again current in all quarters. There is a possibility of an uprising on the Salvadorean-Honduran border, due to the concentration there of dissatisfied elements from both countries. The American Minister in Salvador recommends the presence of a United States naval vessel in Central American waters.

Salvador has resumed its diplomatic relations as a seperate sovereign state with many countries and a Spanish mission has charge of the reorganization of the National Guard.

CONVERSION OF GERMAN WAR VESSELS INTO MERCHANTMEN.

17 February, 1922.

[The following report is a translation of an exposé from the German Admiralty regarding the conversion of war vessels into merchantmen.]

When Germany was robbed of its merchant vessels by the Entente, the question of the conversion of war vessels into merchantmen was examined from all points of view and the trial made. The results of the above proved that the larger ships (line ships) are not suitable for such conversion, as the expense is too great.

A few of the older cruisers have been converted, but it must be remembered that these are similar to a merchant vessel in form.

When the vessels can not be classed in either the German or British Lloyd on account of the arrangement of the framework, the question of conversion has not been considered at all.

The old coastal armored vessels of the Siegfried class have been successfully fitted up as special ships for the transportation of locomotives to Russia, but can scarcely be used for our purposes.

The only real success along this line has been with the torpedo-boat destroyers and M boats (motor boats). One of the shipyards gives the following report in connection with the conversion of a destroyer:

There is submitted herewith a photograph of a torpedo boat which has been converted into a merchant ship. The body of the boat has not been changed. There are 4 cargo hatches and 2 masts. The boat is fitted with a strong motor and has an action radius sufficient for trips in the Baltic and North Sea and has proven very satisfactory. Offers of purchase are coming in all the time and we have only recommendations for this type of conversion.

RIGID AIRSHIPS.

3 February, 1922.

[In connection with an article appearing in the New York Times of recent issue entitled "The Rigid Airship called a Failure," Director Bleistein, a leading German airship constructor and advocate of the rigid type, has prepared a reply which is submitted. This, it is believed, represents the attitude of the German constructors of the rigid airships.]

The Rigid Airship—No Mistake.

In an article of some length, Mr. Julliot has called the rigid airship a mistake. He bases his argument on the catastrophe of *R-38* and the experience of the Zeppelins. But Mr. Julliot is by no means an antagonist of the airship as such; he only is opposed to the rigid system, which indeed is somewhat surprising. This may appear plausible to some extent if public opinion should waver undecidedly between the airship and the airplane, instead of embracing the decision taken by the experts, viz, that the development of both types of aircraft is equally urgent. But when a well-reputed specialist

tries in our day to represent the rigid type of airship as a failure, one is inclined to surmise that his (certainly intended) object is founded on a personal predilection for the nonrigid system. Now such manifestations are so much more dangerous, as the public at large is prone to form its opinion on the statements of experts, and really cannot help doing so. And for this reason the argument of M. Julliot may not remain unrefuted.

I am willing to concede that we have not yet entirely found our way back from the overhastiness of the wartime for a stage of quick evolution and that this fact may have had some effect upon the construction of *R-38* also. It is generally difficult to give an opinion on disasters since there prevails the necessity of freeing ourselves altogether of the natural sympathy with the victims before a cool and rational decision can be made. But finally we arrive at the conclusion that the development of nearly every great technical problem will needs require the loss of human lives, because they are all an offspring of human thought incapable of faultless work. What we can aspire to is but to endeavor again and again to restrict the number of victims. Catastrophes far more disastrous than this one, ascribed by M. Julliot to the indirect consequences of the war, have happened frequently even before the war. To name but a few ones: The crash of the Firth-of-Tay bridge, the wreck of the *Titanic*, the collision in the tunnel of the Paris subway. And if we should calculate the number of pilots who have lost their lives in the "conquest of the air," the figure would exceed any of the disasters mentioned. But this is not the standpoint from which the whole question should be judged for the benefit of mankind.

Whosoever tries to work out an idea and for this purpose is obliged to fight against the demands, is indeed aware that he may fall a victim to the struggle. Same is the case with the followers and collaborators; they have knowledge of the peril.

Looking at the question from this point of view, we have to consider that the *R–38* had not at the time of the disaster got out of the stage of tests and might consequently be compared to a bridge just completed, crashing under the testing load due to a fault of design. It is regrettable but in the nature of things that men bent on testing airships are in a distinctly higher degree exposed to danger in case of such faults of design existing than when testing a bridge. It remains but to ask, Were the men ordered for the trial trip protected against all perils, as far as possible? And this question must be, to our regret, answered in the negative.

It is the first rule for testing trips to allow only the number of people absolutely necessary to participate, a principle disregarded in the case of *R–38*. With only the crew indispensable for maneuver-

ing and the men needed for purposes of research aboard, the disaster would have demanded but half the number of victims. Their so large number can be easily explained: 1st, sporting interests may have caused more than one man to go on board who had no business there in a trial trip; 2nd, what is of more importance beside the testing trip crew of the contractor, the new crew to take charge of the ship also took part in the trips. This was occasioned by the long delay in the completion of the ship caused by the increasing repairs; in view of the advanced season of the year one had to count on the probability of the weather growing unfavorable for the crossing of the ocean; the latter had either to be performed in August or had to be postponed until next spring. And so it was decided to make the American crew familiar with the ship, even during the testing trips.

But besides the unnecessary endangering of too many people, the ship was affected with universally known defects, which prompts the question why so defective a craft was permitted to ascend. One can not help thinking that the responsibility for it ought not to have been borne by a single person, but by a committee of experts. Surely M. Julliott is right in emphasizing that the value of such a committee is not up to the standard of the best member. Still in a good many other cases the responsibility grows too enormous to allow its resting on the shoulders of one man, especially when he is not capable of mastering the entire complicated task. (Why no single man in England can be conceived of doing so may be inferred from what will follow later on.) The situation in connection with *R–38* was: One man is responsible for the design, construction, and all dispositions. Necessarily he must be an optimist, or he otherwise might not be capable of carrying the others off with himself toward the one goal. If he succeeds, a deed is done to the glory of his country and his own glory. If it proves a failure, and a delay of half a year could be called so—he owns to have committed grave errors. Well does he know the defects of *R–38*, but in his optimism he is inclined to make too light of them. Quite cognizant of his heavy responsibility, he is confident of a successful issue, placing the highest trust in his work. More powerfully than he is himself aware of, he is driven by an appreciation of what consequences a failure may have for himself personally. The worst possibility he thinks of, is a total loss of the ship with no harm happening to anybody, as he really could not possibly forget so dreadful consequences of a disaster. And thus he gives the order to ascend.

A whole committee, whose word is much more impersonal, would most likely have shunned the responsibility in a similar case.

Defects of "R–38."

M. Julliot calls *R–38* a sistership of *R–34* except for the new ship being of slightly larger size, but the very increase in size deprives the latter craft of its character of "sistership," so much more since according to English statements, essential alterations had also taken place. And herein lies the source of all the defects.

The English had but some success with their airships after they had begun to construct after German models. They first started doing so when in 1917 a Schütte-Lanz was brought down. They were bound to come to a failure when they commenced to deviate from the patterns. The thoroughly instructed engineers for airship building are not to be found outside of Germany. Constructing rigid airships meant for England about the same thing as the task of building a bridge across the Mississippi River for a civil engineer. He could measure off minutely the dimensions of the Hudson bridge and copy it. But the moment he should be obliged to augment the space and adapt its measure to the new conditions, he would have to start an exact calculation of the strains and forces. And for this work he would be deficient in knowledge and experience, being in the first place ignorant of the original methods of calculation by which the dimensions, etc., of the model were arrived at. England had not succeeded even in copying the German models in an equivalent manner. General Maitland gives for the disposable lift of *R–34* (in this ship's journal of her American trip), the figure of 24.32 tons, her maximum speed being 62 miles per hour, whereas the model ship could carry about 34 tons (not load) with equal velocity. How could they have been able in England to construct between themselves a larger ship developing the same safety and efficiency? (Therein lies the reason why we cannot deem one single person in England capable of mastering the entire subject as we said before.) We may presume that they were not cognizant of the methods of calculating the framework; this can be inferred not only from the building of the girders but also from the manner in which the repairs seem to have been executed.

If the girders in a ship have been damaged by external agencies, it will be sufficient to repair the damaged parts. In the case of a "Schütte-Lanz," seven girders belonging to one rib and broken occasionally in a collision with a tree when landing with a training crew, were for two whole days simply lashed together in order not to interrupt the training trip. The final regular repair, i. e., the changing one of the smashed girders, was only done three weeks later. This way of proceeding was justified because the normal tension applied was well known and it was but necessary to bring the damaged parts up to the previous resistance. But when a break occurs in normal traffic work, it must be surmised that some resistance to normal strain had been left out of consideration and a

thorough insight into the causes of the accident is required. An exact after-calculation of large parts of the framework is often necessary in order to state up to what strength exceeding the permissible limits even unbroken parts of the body may have already been exposed though no outward signs of weakening may be visible. All such parts should be exchanged for spare ones. A strengthening can as a rule be achieved by simply fitting in fresh and stronger girders. This holds first and foremost whenever the overstress arises from jolting. Simple amplifying of the braces of a girder would not do away with the default. The opinion is not to be repudiated that such knowledge as was required to handle the matter with all the thoroughness needed, was not at hand in the case of the *R–38*. Consequently we cannot insist too strongly on the fact that the disaster of the ship is to be ascribed to a defect of knowledge and experience in England and not to the rigid system.

The Rigid and the Nonrigid Types.

M. Julliot is quite right in stating that the mistake was implied in the system, but it was not a question of the rigid system, but of the system of * * * policy and administration. If they had availed themselves of the German experience the issue would have been a different one. What now is stated again to the discredit of the rigid type is but the old argument in the contest between "rigid" and "nonrigid" * * * arguments which in the lapse of time have indeed grown rather stale.

For a long time in Germany the distinction has no longer been made between rigid and nonrigid, but between pressure (taut) and slack. A football when full of air is taut, i. e., its outer envelope is tight, being stretched by the pressure of the air pumped in. Such is also the meaning of Mr. Julliot's "supple dirigible balloon." It is unimportant whether the construction of the keel or the car renders the ship a nonrigid or semirigid one. The shape is preserved by the inner pressure of the gas opposed in its work to the outer pressure of the air current induced by the ship's motion; whereas the outward shape of the rigid ships is maintained by its framework, the gas-chamber being, as in the case of the free balloon, solely under atmospheric pressure. They need, in the first place, to be gas-tight, but not resistant to tensile strain.

For what reason the rigid system is supposed to be faulty is, to our regret, not made manifest by Mr. Julliot.

When Count Zeppelin was fighting the contest for his rigid system (the first rigid construction having been previously carried out by the German Schwartz) he had numerous adversaries who stood by the taut airship. The difficulty was so much the greater for the adherents of the rigid, since the advantages of this latter system only.

become fully evident with rather large dimensions. The quite different method of maintaining the shape requires an essentially different construction of the gas chambers, since both pressure and volume of the enclosed gas vary. When an airship ascends to 300 feet, or if the gas is heated by 5° F., its volume is increased by 1 per cent as long as the atmospheric pressure remains unchanged; if, on the other hand, the volume remains constant, the pressure grows in proportion. This law of physics makes it necessary to let the gas dilate without varying the pressure, because the resistance of the envelope is but capable of sustaining the normal working pressure lest it should burst. To this end the gas chamber is fitted with one or more ballonets kept under required working pressure by means of a ventilator in the car. By the expansion of the gas during the ascent the ballonets are compressed and part of the air is forced out through the air valves. Thus it is evident that a ship of the taut system can but reach an altitude depending on the state of the ballonets, since these ballonets being once entirely compressed by the gas the latter must be permitted to escape by means of the safety valves in order to avoid bursting. The ship is safe enough as long as it ascends. But when the descent begins, the gas is compressed to the same degree as it had before expanding. A certain amount of gas having been lost, the corresponding space can not any more be filled out by the ballonet, even if inflated to its full extent. The ship is losing her shape and gets unworkable. Thus her pilot or captain has, in addition to his other work, to continually look out most carefully that the pressure should remain high enough to maintain the form, but not high enough to risk the danger of bursting, and finally that the height, limited by the dimensions of the ballonets, is not exceeded. Although quite a part of the necessary operations are worked by automatic contrivances, the captain still has to be constantly on the lookout; particularly in winter the automatic valves easily grow unreliable on account of being covered with ice.

The rigid airship can do without all such dispositions, the gas chambers in the interior being fitted at their lower extremity with valves which are not intended to maintain a desired pressure but only to prevent the influx of air when the chambers are filled. If we do not care to preserve the gas in pure condition, the chambers may as well remain open at their bottom like the appendice of a free balloon. Therefore the pilot need not worry during the voyage either about the gas or the pressure or tightness. Should a valve not work, it suffices to make a cut into the bottom of the cell. The safety of the voyage is not impaired by such an operation in the least and the little hole can be patched up after having returned home. With the taut airship, on the contrary, any aperture allowing the gas to stream out will lead to a breakdown in a short time

since it grows impossible to maintain the pressure required. Thus the taut ship is by far more complicated in construction and operation than the rigid one.

With increasing size and speed the taut airships are somewhat more and more losing their entirely nonrigid character. More and more has a rigid system of construction been introduced, the different parts being connected with each other by elastic joints. But this elasticity is not desirable, it is simply necessary to compensate for the undesirable deformations of large or small magnitude. This circumstance, as well as the necessity of connecting in some organic manner the rigid additions and accessories to the envelope, requires a complicated arrangement.

And now as to safety. The easier any form of craft steers, the surer it is to respond to the will of the pilot. In this respect the taut ship is decidedly inferior to the rigid. But disregarding this, the evolution of the rigid system has brought further points of superiority to its credit. Leaving out of consideration things which happened during the war, no accident to a rigid airship has cost a single human life. Disasters with loss of life have occurred only in the pressure or taut types. The *Morell* (?) airship had a breakdown in the United States—three men dead, four severely injured. In France *La Republic*, piloted by M. Julliot himself, broke down due to a propeller breaking off and tearing a hole in the envelope; four men were killed. In Germany the *Erbslöh* fell with the envelope torn to pieces; five men were killed. Now a Zeppelin: a broken propeller tore a hole in the outer cover (and possibly the gas bag). The ship landed for a short time, repaired the damage and continued on her voyage. Or a Schütte-Lanz: a propeller broke two girders and left a hole of about ten square meters in the envelope. The release of some ballast enabled the ship to proceed and reach its destination. Another accident to a Schütte-Lanz: a rope caught in the propeller of a side car (due to carelessness) and the car was badly broken with the engine working right against the hull. Naturally great damage was done to both the car and the hull. However, the ship proceeded under three-fourths power and no landing was necessary.

It has been often said that as a matter of fact the frame of the rigid airship is not at all rigid, as it must withstand all the stresses for which it was constructed, an opinion which is also shared by M. Juillot. A person who says that does not, perhaps, know that he is saying something to the highest credit of the constructor. It means that all possible stresses occurring during actual operation have been foreseen and taken into account. The object of an airship not being to ram trees or balloon sheds, it is simply sufficient if the

construction be solid enough to withstand the shocks and jolts of hard landings, to allow of putting the ship in its hangar with not too violent a cross wind, and under all circumstances to keep it in operation and easily maneuvered while in the air. Who demands more expects everything from the ship and nothing from the pilot. A sea ship thrown on a reef in high water will break to pieces at low tide. Still no one would assert that the construction of the hull was too weak, a sea ship not being built to run on reefs without damage. There is no difference between an airship damaged on being brought into the hangar in stormy weather; for example, the good ship *Mount Clinton* during a gale last November broke away from her wharf, sank several small fishing craft, and was herself severely damaged, with some loss of life.

It has been proved by the accidents referred to above that a rigid airship is capable of standing even a lot more than she has to do in normal work, let the weather be ever so bad, and the breaking of odd girders, due to unforeseen circumstances, exercises no influence on the safety of the airship. However, on the contrary one single rent in the envelope of a pressure airship leads to a disaster, owing to the explosive character of the gas flowing out under pressure.

In reviewing all accidents known to have happened to airships, we become convinced that whenever a rigid had a breakdown a pressure airship would have invariably been a victim to the same circumstances, whereas all sorts of accidents happening to the pressure system ships would have had no influence upon the safe operation of a rigid airship. Can we consequently hope to derive any benefit from the supple airships of M. Julliot?

Transcontinental air traffic will undoubtedly require the use of very large airships. But, with growing size, the advantages of the rigid type become more and more tangible, whereas those of the pressure system recede into the background as new problems and difficulties arise which are hard to overcome. The construction of rigid airships has to-day reached a size of more than 100,000 cubic meters, while the largest pressure airship does not exceed 30,000 cubic meters.

The large airships of the future will all belong to the rigid system.

GUATEMALA.

11 March, 1922.

Source: Military Intelligence Division.

The recent presidential election in Gautemala seems to be one of the salient features in that country's history. This election is the culmination of a situation which began in the fall of 1920, when organized political resistance was offered to Guatemala's entering the Central-American Union, with the resultant overthrow of President Herrera. Gen. Jose Maria Orellana was inaugurated March 4

after an almost unanimous election. He is a member of the Liberal Party, and two of the planks of the platform of his party are: (1) the development of the Liberal program; (2) a pledge to abide by the results of future elections. During the election, which extended over a week, the Conservatives or Clericals, the opposing political party, staged some revolutionary demonstrations, but those amounted to little, although it is intimated that British and Spanish diplomatic representatives to Guatemala lent more or less assistance to the anti-Orellana force. General Orellana is said to be a strong character, and he is supported by a strong cabinet. This new government is not particularly friendly to Mexico, but it would appear that both countries have troubles enough within their own boundaries to prevent the expenditure of any force in a war with an outside nation.

JAPANESE NAVAL PERSONNEL.

27 February, 1922.

[Study, Analysis, and Estimate of Japanese Naval Personnel and of the Japanese Navy as a Fighting Organization.]

This office has, for some time past, believed that the Japanese Navy, as a seagoing organization, is greatly overrated by every country and most naval officers.

In order to obtain data that would either prove or disprove this belief a rather comprehensive study has been made of the duties of every line officer above the rank of lieutenant commander on the active list up to January 1, 1922. The results of this research are compiled in Table I appended hereto.

Also a study has been made of the amount of cruising done by all the principal vessels of the Japanese Navy from February, 1921, to February, 1922. This, together with the fleet organization and the amount of cruising in formation, has furnished the data for Table II appended.

It has been assumed that the efficiency of Naval Personnel of two countries is in direct proportion to their amount of seagoing experience, other considerations being equal. And that valuable seagoing experience can only be obtained by, first, cruising, and, second, cruising in formation.

From Table I it is seen that: The average total sea service of all Japanese flag officers is less than 9 years (28 per cent of their total commissioned service). This is about equal to the sea service of our own officers at the bottom of the lieutenant commanders' list, and is about 42 per cent of the sea service of American flag officers.

The average sea service of captains is 6.6 years (32 per cent of their total commissioned service) and about 40 per cent of the sea service of our own captains. The average sea service of commanders

is 5 years (28 per cent of their total commissioned service) and about 44 per cent of the sea service of our own commanders. In addition to this short time at sea the records show that for those officers who go to sea at all the average time in one ship or sea command for commanders and above is slightly less than one year, which must be both bad for the ship and inadequate for the officer.

Table II gives a fairly accurate idea of the amount of cruising done in a year. Of this total amount barely 10 days are spent in fleet maneuvers, and even then the number of ships in a unit is so small that a great amount of valuable training can not be obtained by anyone from the commander in chief to the watch officers, either on deck or in the engine room.

The fleet organizations of the Japanese Navy for many years past will show the small number of ships in each unit and how little training can be obtained from division maneuvers and cruises. The other ships of the navy, assigned to naval stations, etc., nearly always operate alone or in small groups.

If the entire sea service of Japanese officers were spent actually cruising or maneuvering under the above conditions it would be bad enough, but the case is actually worse. One third, and often more, of the ships of a class are in navy yards at all times undergoing a year's overhaul and refit. During such overhaul periods the ship seldom, or never, moves from a buoy or dock, but the complement of officers assigned (which is full except for a few juniors) is credited with sea service. A careful study of this phase shows that about one-third of the sea service as captains and commanders is spent on these ships which do not cruise more than a few days in a year.

The efficiency of the Japanese Navy, as compared with the British and American, could not be greater than the ratio of their experience afloat. But since their adaptability, initiative, resourcefulness, and originality is not comparable with that of the Anglo-Saxon, the ratio of sea service alone gives too high an index of their relative efficiency. Further, a glance at their fleet organization for the past seven years shows that the first (maneuvering) fleet has, on the average, consisted of two divisions of capital ships of two or three ships each, a cruiser division of three or four ships, and a destroyer division of about 12 boats (three flotillas).

This organization is numerically inferior to the British and American, and consequently—even with an equal amount of cruising and maneuvering—could not furnish the quality of training and experience provided by the Anglo-Saxon fleets.

The Japanese naval officer is so short a time afloat, in command, and so seldom under way that it is almost impossible for him to develop any originality or skill along tactical lines. Their efforts

must necessarily be devoted principally to training themselves in the routine duties of life afloat and the fundamentals of tactics.

Sheet 4.

In view of the fact that the commanders in chief and other flag officers are generally in command for only one year, they, too, have little opportunity of developing either themselves or the fleet.

Although the younger officers are overburdened with technical education at the expense of practical experience afloat, there are no educational requirements or provisions for officers above the grade of lieutenant commander. This precludes the senior officers obtaining, through courses at a war college, the strategical and tactical knowledge which they are unable to obtain afloat. It should be remembered, however, that certain superior officers attached to the naval general staff are also assigned to the naval higher college, and it is logically to be supposed that these selected officers develop, on the maneuver board, the war plans for the naval general staff.

Counteracting to a certain extent the above deficiencies is a complete absorption in and devotion to duty, combined with unsurpassed loyalty, by all officers and men alike. Besides, officers are universally students of naval history to an extent undreamed of, in the American Navy at least.

Not only is efficiency afloat handicapped by the numerous causes already cited but there is clearly manifest throughout the service a complete lack of appreciation of the true value of experience at sea. The official records show that the officers having the most sea service are the first to be retired and the last to obtain promotion, whereas those who do the least sea service and serve most often at the Navy Department, or near Tokyo and abroad, receive the quickest promotion and the greatest preferment. It therefore appears that the habitual seagoing officers fall under one of two categories, namely, those without influence with the powers that be and those who are considered least efficient ashore.

What has been stated above in regard to officers must necessarily apply also, in a certain degree, to the enlisten personnel.

In conclusion it is the opinion of this office that the Japanese Navy is greatly overrated as a fighting organization. Its success in the wars with China and Russia have given the world a greatly exaggerated idea of its efficiency, because in both cases the enemy was incredibly unprepared and inefficient. In the event of a war with England or America the conditions would be reversed. Small groups and individual units (especially cruisers and destroyers) operating alone, would probably acquit themselves very creditably in battle, but it is not believed that the Japanese flag officers are fitted to effi-

ciently handle the various units of a combined force in a modern, major action; nor could they hope for intelligent, coordinated, trained, assistance from group commanders.

Taking into consideration the almost universal lack of initiative combined with the great weakness of slavishly adhering to a prearranged plan, it is to be expected that in the early stages of an engagement their movements and disposition of forces would indicate the historical plan of battle (previously provided by the naval general staff) they intended to pursue throughout the action.

The most effective means to defeat them would be to counter in the most unexpected manner, i. e., employing the element of surprise to the maximum—even to the point of apparent recklessness.

To this end a careful study of their own successful engagements, as well as of other celebrated naval actions, would probably furnish the key to the Japanese plan of battle.

TABLE I.

Rank.	Number in grade.	Average.	Minimum required years to attain grade.	Minimum required years in grade.	Average years in grade of—				
					Admiral.	Vice admiral.	Rear admiral.	Captain.	Commander.
Admiral	12	58.7	.....	None.	3.4	5.7	4.4	5.0	4.3
Vice admiral	37	53.0	.....	None.	.....	2.2	4.0	5.4	4.3
Rear admiral	55	49.0	16.5	None.	.....	.....	1.1	5.2	4.6
Captain	146	42.6	13.5	3	.....	.....	.....	1.8	4.1
Commander	357	40.0	11.5	2	.....	.....	.....	.....	1.7

Rank.	Average total commissioned service.	Average total shore duty.	Average total sea duty.	Per cent of sea duty.	Average sea duty in grade of—					
					Admiral.	Vice admiral.	Rear admiral.	Captain.	Commander.	Below commander.
Admiral	38.4	29.1	9.3	24	0.3	1.2	0.6	1.7	1.0	4.5
Vice admiral	32.7	23.3	9.4	29	.....	.4	1.1	2.1	1.3	4.5
Rear admiral	26.4	18.2	8.2	31	.....	.....	.1	2.2	1.4	4.5
Captain	20.6	14.0	6.6	32	.....	.....	.....	.7	1.4	4.5
Commander	17.8	12.8	5.0	28	.....	.....	.....	.....	.5	4.5

Rank.	Average years in one ship or sea command.				
	Admiral.	Vice admiral.	Rear admiral.	Captain.	Commander.
Admiral	1.0	0.9	0.8	0.8	1.0
Vice admiral	.....	.8	1.1	.9	1.0
Rear admiral	.....	.....	.4	1.0	.9
Captain	.....	.....	.....	.9	1.0
Commander	.....	.....	.....	.....	.7

The following table has been compiled from the movements of ships recorded in the Official Gazette. It is manifestly only an approximation, but it is the best obtainable data. The task of com-

piling this data is so laborious and tedious that it has been impossible to complete it for all ships in time to accompany this report.

When the complete cruising report is finished it will be submitted and a new and more complete table will be forwarded to replace this one.

Explanation of Columns.

Column 1. Number of times getting under way.
Column 2. Total days under way.
Column 3. Total miles cruised.
Column 4. Number of times under way with less than 4 ships (except destroyers, number of times under way without major ships).
Column 5. Number of times under way with one fleet.
Column 6. Number of times under way with two fleets.

TABLE II.

Ship's name.	Column 1.	Column 2.	Column 3.	Column 4.	Column 5.	Column 6.
FIRST FLEET.						
Nagato	51	46	10,000	38	8	5
Fuso	43	36	9,000	30	8	5
Tatsuta	31	26	6,000	18	8	5
Nire	29	26	6,000	16	8	5
Kuri	29	26	6,000	16	8	5
Toga	29	26	6,000	16	8	5
Kaki	29	26	6,000	16	8	5
Nashi	29	26	6,000	16	8	5
Take	29	26	6,000	16	8	5
Momi	29	26	6,000	16	8	5
Kaya	29	26	6,000	16	8	5
SECOND FLEET.						
Kongo	40	32	7,500	19	16	5
Kirishima	45	31	7,800	24	16	5
Kuma	30	15	3,600	13	13	4
Tama	39	24	6,000	18	16	5
Kiso	28	18	4,700	17	8	3
Oi	7	5	1,500	7	0	0
Kitagami	30	32	7,000	15	12	3
Tenriu	14	14	3,600	8	6	0
Minekaze	38	32	7,500	20	15	3
Sawakaze	38	32	7,500	20	15	3
Yakaze	38	32	7,500	20	15	3
Okikaze	38	32	7,500	20	15	3
Kawakaze	38	32	7,500	20	15	3
Tanikaze	38	32	7,500	20	15	3
Kiku	38	32	7,500	20	15	3
Aoi	38	32	7,500	20	15	3
THIRD FLEET.						
Kashima [1]	23	92	24,500	23	0	0
Katori [1]	23	92	24,500	23	0	0
Idzumo [2]	26	97	21,500	26	0	0
Yakumo [2]	26	97	21,500	26	0	0
Asama [2]	13	70	14,700	13	0	0
Iwate [2]	15	76	15,800	15	0	0

[1] Crown Prince's trip to Europe.

[2] Midshipmen's training cruises.

UNASSIGNED.

Ship's name.	Column 1.	Column 2.	Column 3.	Column 4.	Column 5.	Column 6.
Ise	10	5	1,500	10	0	0
Hyuga	0	0	0	0	0	0
Yamashiro	5	7	1,400	5	0	0
Settsu	9	3	700	9	0	0
Aki	3	3	650	3	0	0
Satsuma	18	7	1,700	18	0	0
Hiyei	8	2	550	8	0	0
Haruna	5	3	800	5	0	0
Mutsu	e	e	10,000	e	0	0
Hizen	8	12	2,500	8	0	0
Ibuki	3	2	450	3	0	0
Iwami	8	30	7,800	8	0	0

NOTES ON TABLE II.

The first fleet, during most of the period covered by this report, consisted of the *Nagato, Fuso: Chikuma, Yahagi: Tatsuta* and twenty-fifth and twenty-sixth destroyer flotillas. Late in the fall of 1921 the fifteenth flotilla was also added.

The second fleet consisted of the *Kongo, Kirishima: Kuma, Tama, Kiso*, and later *Oi: Tenryu* or *Kitagami* and second and fourteenth destroyer flotillas. Late in the fall of 1921 the fifth flotilla was also added.

The third fleet never cruised as a unit.

On April 8, 1921, the first fleet was assembled for the first time in the year; it remained in company one day only.

On May 26, 1921, the first and second fleets assembled (at Sayeki Bay) for the first time; they remained in company for three or four days. They again assembled (always at Sayeki Bay) on the following dates and for the times shown: July 14 for 6 days. July 26 for 10 days. September 10 for 13 days. September 27 for 4 days. On several of the above occasions the *Chikuma* and *Yahagi*, of the first fleet, and the cruiser division of the second fleet were not present.

Aside from the above times, when the two fleets were assembled at Sayeki Bay, the only cruise in formation during the year was that of the second fleet from Sasebo August 20 to Port Arthur August 22 and from Dairen August 27 to Kure September 1.

About the same time the first fleet visited Tsingtau, but it is interesting to note that the *Nagato* left Sasebo on August 17, arriving Tsingtau August 21. The *Fuso* left Kure August 17, arriving Tsingtau August 22. The *Nagato* left Tsingtau August 22, arriving Kure August 26, and *Fuso* left Tsingtau August 28, arriving Kure September 1.

It is apparent from the movement of ships throughout the whole year that whenever it was a question of movements to and from assembly points, in company or alone, ships almost invariably proceeded singly or in small groups.

During October, when many independent vessels were temporarily attached to the combined fleet for fall maneuvers, no actual fleet maneuvers were held, nearly all ships and destroyer flotillas operating independently from different bases, and it was seldom that more than one division of major ships was assembled.

From Table II it will be noted that of the modern capital ships *Nagato, Fuso, Kongo, Kirishima, Ise, Yamashiro, Haruna*, and *Hyuga*, the five last named were in no organization and seldom moved, and the *Hyuga* never moved.

The first four (in regular fleet organizations) cruised an average of 8,600 miles during the year. The other five averaged only 850 miles during the same period, or *three and one-half days underway at 10 knots in an entire year.*

ORGANIZATION OF JAPANESE NAVY.

February 2, 1922.

The advisory body in the organization of the Japanese Navy is composed of two boards appointed by the Emperor. These are the board of fleet admirals and the high naval council. The former consists of two members: Fleet Admirals Viscount Inoue and Count Togo. The latter consists of six members: Fleet Admiral Viscount Inoue (honorary president), Admiral Baron Shimamoura, Admiral Nawa, Admiral Prince Higashi-Fushimi, Admiral Baron Dewa, and Admiral Baron S. Kato.

These two boards are the real navy power, each having about equal weight but working together.

Admiral Count Yamamoto (retired) is also a silent but great power in the navy. His influence is most likely exerted through Admiral Togo.

The high naval council selects its own members, who are appointed by the Emperor. The Premier usually selects and recommends to the Emperor the Minister of the Navy. In case he does not know a competent officer to fill this position, he appeals to the high naval council, which in conjunction with the board of fleet admirals selects and recommends an officer for the position. In any case the power of these two boards in selecting the minister is considerable, for the Premier would have difficulty in appointing any officer to the position who was not acceptable to them.

The Minister of the Navy is in all cases senior to the chief of the naval general staff. In order to insure harmony between these two officers, the final selection of the chief of the naval general staff rests with the minister.

It is almost certain, however, that the officer he selects must be acceptable to the high naval council and the board of fleet admirals, for it is by these boards that the officer's name is presented to the Emperor for appointment.

Although both the minister and the chief of the naval general staff are nominally responsible directly to the Emperor, yet the minister's duties and authority give him control over the chief of the general staff.

The same procedure of appointment and balance of authority does not exist in the case of the army, where the chief of the general staff is usually senior to the Minister of War and appears to have the greater power of the two.

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JAPANESE PRESS AND OTHER PUBLIC COMMENT ON THE CONFERENCE.

January 10 to February 15, 1922.

Yomiuri, January 10.—Disappointed with Washington.

The conference has not gone deep enough into the problems that confront the world. England and France are still unfriendly. The California question, the Shantung question, and the Chinese question in general have not been settled. The naval holiday is no preventive of war. We are afraid that the Washington Conference has done little to prevent war. Our delegates are not to blame, but anyone who recognizes the conference as an unqualified success is making a great failure.

Jiji, January 10.—Submarines.

With England's proposal for the total abolition of submarines defeated, it is incumbent upon the nations to lay down strict rules governing submarine warfare, and to prohibit the repetition of the horrors caused by Germany's indiscriminate sinking of merchant ships.

Yorodzu, January 10.—Prohibit Poison Gas.

If poison gas is prohibited by the conference it will be a brilliant success from the standpoint of humanity. It is true that rules laid down now may not be kept in war, but it is worth attempting. Even a violated rule is better than no rule at all.

Kokumin, January 12.—Army Must be Reduced.

Once the limitation of the navies is decided upon there is no logical reason why we should not voluntarily reduce our land armament at the same time. America and England have gone ahead with reduction of their armies, and Japan is thus free to do the same.

It is not a question of how much the army will be reduced—this can be decided upon by experts—the thing that is necessary is that we reduce to some extent in order to show the world that we really desire peace.

Japan Advertiser, January 14.—Yawata Workmen want Protection.

The employees of the Imperial Iron Foundry at Yawata met on January 15 to demand immediate adoption of universal suffrage and the provision of adequate measures for relief of unemployment arising from the cutting of armaments.

Kokumin, January 14.—Washington Conference a Failure.

Even the United States recognizes the failure of the Washington Conference. The conference will terminate without reaping tangible and satisfactory results, and the Harding Administration will become the target of attack of public opinion.

Asahi, January 16.—Japan's Island Fortifications.

That the Loochoo and the Bonin Islands are an integral part of the mainland of Japan viewed from historical, legal, and conventional viewpoints is above doubt and misconstruction. We wonder at the stand taken by Great Britain and United States on the status of these islands. Japan has as much need to fortify these islands as she has to fortify the main island of Japan.

Yomiuri, January 16.—Why not Meditate on Shantung?

The points of discussion between China and Japan on the Shantung question are trifling and insignificant. The two countries could easily get together and settle the question satisfactorily to both were it not for outside interference. We are extremely solicitous that our authorities will not commit further blunders and failures in connection with Shantung question, being led astray by narrow views of their dignity.

Yamato, January 19.—Japan and the Bonins.

We take the definition of the territory for limitation of Pacific fortifications between 30° north to the equator and from 180° east to the coast of China as being extremely unfair and inappropriate. The majority of the possessions of the United States and Great Britain are out of this area, and we presume that is the reason that it was adopted. England and United States are expecting Japan to agree to this, and if she refuses she will be held responsible for the failure of the conference. Japan can never agree to this proposal, however, even at the expense of the success of the conference.

Japan Advertiser, January 20, 1922.

The Diet will meet on January 21 to begin work after the new year's holidays. The Kenseikai is expected to open a bitter attack against the Government for its foreign policy—particularly at the Washington Conference—and the Seiyukai, as represented by Premier Takahashi and Count Uchida, Minister of Foreign Affairs, will make an attempt to forestall opposition by explaining fully the progress made.

Osaka Asahi, January 20, 1922.

The Washington Conference has been a success in so far as the limitation of capital ships is concerned. We cannot but notice the lack of proper spirit of England and United States in making such demand as 30° north to the equator and 180° east to coast of China. This proposal is a representative of the design of militarists in the two countries and not the true wish and claim of their peoples.

Yorodzu, January 20, 1922.

America insists upon the maintenance of the status quo in the Bonin Islands, but insists that Honolulu is a part of her own mainland. We should never agree to such a thing.

If our delegates allow all questions to be settled so as to please the United States then they are nothing more than hirelings of the United States and are not qualified to act as delegates of our country. Anyhow, the dissatisfaction and discontent of our people have reached the bounds of patience for what they have done.

Yomiuri, January 25, 1922.

It is our deep conviction that France and Japan must be bound together not only by friendship stronger than alliance, but also, due to their positions in present day national policies, they should stand together. France unwillingly acted in concert with Russia at the termination of the Chinese-Japanese War, but only on account of her alliance with Russia. Japan and France must together meet the new conditions in the world through mutual assistance and cooperation. Events at the Washington Conference and in Europe unmistakably point to this necessity. Japan and France's position in the Quadruple Entente are insignificant and valueless unless they combine.

The country that will keep in restraint the domination of the United States and Britain in the Pacific and eventually in the world is Japan and that which will check their rampancy and help Japan in her task is France. We hope that Marshall Joffre will understanad that the reception he is having at our hands is no ceremonious affair, but the manifestation of our people toward France, and will take it into consideration when he maps our foreign policies for his country in the future.

Yorodzu, January 26.—Uchida Sacrificing to United States.

Count Uchida, Foreign Minister, said in the Lower House that in view of the fact that the United States proposed the Washington Conference it was necessary to let her have her own way in the disposition of various questions. We can understand from what the Foreign Minister said why our delegates have made concession after concession and heaped humiliation and disgrace upon the nation at the conference. Count Uchida is sacrificing our interests in order to please the United States. If he is called a traitor he will have no word to deny it. Small wonder, therefore, that there are some people who revile our foreign office as the detached office of the Department of State of the United States.

Osaka Asahi, January 27.—The Naval Saving.

The new naval agreement is designed to limit wasteful warship construction competition. The limitation should extend to all classes of vessels. Our navy department is planning to spend the

money appropriated for the 8-8 program on smaller vessels, thus setting the aim and spirit of the conference at naught. It will deepen the doubt and suspicion of the Powers toward Japan. A small-ship competition results.

We must strongly oppose the appropriation of huge sums of money for small ships. We ought not allow the navy to expand, but should keep watch on them that they carry out only programs previously authorized. The present ministry is cunning enough to feign to accede to popular wishes in the retrenchment of expenditures on the one hand and on the other to comply with the requests of militarists.

Chuo.—Difficulties of Army Reduction.

It is the consensus of opinion of military experts that, in view of the present standard of national education, one-year active service is impracticable in Japan. We entirely agree to the reduction and adjustment of our army, but we urge at the same time that great caution must be exercised in effecting it, taking into consideration the situation in the neighboring countries and the position of the Empire in the Far East. To vainly clamor for cutting down our land forces being biased in judgment by the tendency for radical reduction or limitation so prevalent in the world must be conscientiously avoided for the true interests of the nation.

Asahi, January 31.—Army Reduction.

At the Washington Conference nothing was done regarding the reduction of armies, but our delegates made a declaration of the future policy of Japan's army. Needless to say the question of which should predominate, army or navy, is one that should be decided by that country's peculiar position. Japan should carry out a drastic reduction of her army, voluntarily, as our national defense does not call for the present strength. It is self-evident that in Japan the navy should predominate. We have nothing to say if the militarists contemplate territorial expansion in Asia—for this we would need a big army, but this is absurdity itself. The army could, without prejudice to the national defense, be cut down much more than the navy.

Nichi Nichi, January 31.—Army Reduction.

Now that the Government has concurred in the reduction of the navy it follows that they should not oppose army reduction, either in theory or in practice. It will be well advised if it carries into effect with sincere intentions the spirit of military curtailment by reducing the army substantially.

The national power of Japan at present is too small to warrant her spending the major part of her budget for military armaments. She should cut down on military expenses and encourage industry

and commerce with the savings. This would put her in a position where she would be able to maintain a large army and navy if the occasion ever arose where they became a necessity.

Japan Chronicle, February 3, 1922.

On February 2 the Kenseikai party introduced a resolution into the House of Representatives urging the Government to take measures for the reduction of the army in conformity with the spirit of the age.

Baron Goto, Mayor of Tokyo, in Statement to Press, February 4, 1922.

Extract: "I am keenly disappointed with the Washington Conference for not making the peace of the world an assured thing. But I am glad that, however temporarily, the construction of war vessels has come to be stopped. As a result of this the nations will accumulate large surplus in their treasuries which can be used in the interests of peace. My only fear is that when these large sums begin to pile up there will be a scramble in all departments of the government with the result that the money will not be spent to the best advantage of the country.

"Had it not been for the Washington Conference Japan might have been forced into bankruptcy with her big fleets of war vessels moored at anchor in naval ports.

"A gigantic organ of investigation of industrial conditions should be established similar to that in Germany before the war. This organ should guide and encourage the nation in progress in commerce and industry. Unless something like this is done Japan will become like the giant bird that lived in ancient times in Siberia and Africa, which was big in body without having enough blood to go around the body."

Jiji, February 4, 1922.

It is a matter of great satisfaction that the Aleutian Islands have been brought within the pale of the limitation agreement. This decision removes our anxiety in regard to defense of the northern portions of the empire. It seems a fair exchange of concessions, in that if the Aleutians, extending from Alaska toward Japan, menace this nation, the Kuriles, extending from Japan northward, are a potential to Alaska and hence the United States.

We can not rejoice too much at the conclusion of the naval treaty, and it is our earnest prayer that the Powers will thoroughly carry into effect all that are provided for the treaty, thereby bringing the spirit of the Washington Conference into full play and laying the foundation of permanent peace among nations.

Yorodzu, February 4, 1922.

NOTE.—The "Yorodzu" misconstrues the fortifications agreement to include the Aleutian islands in the list of islands not covered by the limitation agree-

ment. Remembering the anti-foreign tone of the "Yorodzu" and its reputation for yellow journalism and sensationalism it is not too much to believe that this misconstruction is deliberate.

According to the agreement, Japan promises to maintain the status quo in the defenses of all her Pacific islands while the United States places only Guam and the Philippines in the scope of the agreement, *excluding Hawaii, the Aleutian Islands and other island possessions.* Therefore, the United States is able to enlarge her warlike equipment in most of her Pacific islands, and having powerful naval bases in the Aleutian Islands in the north and in Hawaii in the south in propinquity to Japan, menace the latter whenever she pleases.

Britain consents to maintain the status quo in those islands mandated to her, putting other insular dominions and possessions in the Pacific Ocean outside the scope of the agreement.

It is not too much to say that Britain and the United States have been virtually exempted from similar limitation. The fact that Japan has had to fulfill unreciprocal obligations in the limitation of her Pacific defenses is a source of deep regret to us. Japan has been conquered by Great Britain and the United States at the conference. The unrest and concern of the people for their safety will increase in the future. We must strive for the construction of a new Japan which may be able to escape the menace of the United States.

Nichi Nichi, February 4, 1922.

It has long been understood that China and Japan should not argue over temporary gains and advantages or questions of sentiment, but for some unaccountable reason the two countries could not settle the question of Shantung without outside help. However, the means was justified by the end, and we view the settlement made at Washington with unbounded joy.

However, in China, there is not so much satisfaction expressed over this settlement for there were many Chinese who wished a total and unconditional surrender. Japan's sacrifices are not appreciated and the settlement of the question, even in the minds of those who rejoice in the final settlement of this long and irritating question, is credited more to the prompting and gentle pressure of the United States and England than to the sincere and friendly desire of Japan to clear up Sino-Japanese entanglements.

Japan should lose no time in dispelling the suspicions of China and establishing a helpful and lasting friendship with that country. It will be a difficult and tedious undertaking, but is the only way in which peace of eastern Asia can be assured. We must be extremely patient and persevering, and in the end great results may be expected.

Yamato, February 5, 1922.

Japan is the Lord of the Orient. The Far Eastern question should have been settled by Japan as the moving factor. To settle questions like the Shantung affair at the instance and upon the terms of other nations is to compromise the dignity of the Lord of the Orient. Japan's position in the settlement was the same as a defendant in a court of law. If we have not invited the scorn of the other powers as well as China, it is a miracle indeed.

If Japan had secured real advantages, whatever the manner of settlement, we might have acquiesced, but the terms of settlement were poor and disgraceful.

Nichi Nichi, February 5, 1922.

Japan has gained nothing from the Siberian expedition except the hate of Russia and the suspicion of America. Is it a wonder that the people are demanding withdrawal, and the cessation of the expenses of millions of yen that are badly needed at home?

Japan Advertiser, February 7, 1922.

A Japanese general "in close touch with the war office" said in an interview with the Yorozu that the opinion of the army is solid against reduction of the army to any large degree. "The possibility of Soviet Russia becoming a menace to Japan is not an idle dream," says the General. "France showed that she feared Russia when she refused to cut down her army. There is a certain power behind Russia, a country capable of doing things beyond the expectation of others. Thus it is not too much to expect that soon Russia will be on her feet. We can not have this happen without being prepared to withstand any attack she might make on Japan."

Asahi, February 8, 1922.

China was the recipient of good will and liberality at the conference, as well as the most successful in material gains. Now is the time for her to show her gratitude to the nations by cleaning up her internal troubles and stabilization of her internal political and industrial conditions.

Japan Advertiser, February 8, 1922.

The Seiyukai (Government party) and the Kokuminto party have introduced bills into the Diet calling for the reduction of the army. The Seiyukai bill calls for a slight reduction of from 50,000 to 100,000, while the Kokuminto bill calls for the cutting of the army in half and changing the conscription term from two to one year. Two Kenseikai members tried to speak against the bills, but were ignored.

Chuo, February 9, 1922.

The people ought to detach their gaze from the results they have derived from wars. They should emerge from their illusion and phantasmagoria which the results of their victories in past wars have conjured up in their breasts. They have but to devote their whole energy and power to the advancement of their industries, whereby a new era and life will come to the nation.

Yorodzu, February 9, 1922.

Why do our delegates at Washington not rebuke the insolence of the United States? Has not the Chinese delegation declared its dissatisfaction with the results of the conference? While Japan has been forced to give up all that she possessed in China, except the lease of Port Arthur and Dairen and the South Manchuria Railway, and limit even the defenses of a part of her homeland, Britain has acquired the right of control of a railway in China and the United States has increased her exports to China.

All the Japanese must immediately concentrate their efforts on the opposition to the ratification of those treaties made at Washington.

Nichi Nichi, February 10, 1922.

The actual results of conference have turned out to be more beneficial than was generally expected. The Japanese are not entirely satisfied with the conference, but we must remember that to make the conference a success each country must sacrifice something. If all of the conference delegates had taken an unbending attitude the conference would have been a failure.

Hochi, February 10, 1922.

The conference was a great success for Britain and the United States and President Harding may well congratulate himself for it. For Japan it was a failure, and we can not bring ourselves to be gratified by it.

Japan has sustained such a loss through the conference as she would have suffered had she been defeated in her desperate war with Russia.

Osaka Mainichi, February 11.—A Grand Success.

The number of treaties and agreements of superlative political and naval importance concluded by the conference constitutes a mighty achievement and a grand success. The conference successfully disposed of fundamental questions of international politics in 80 days. So in point of time and volume of work done it is an international convention of unprecedentedly large substance and high effect.

We ascribe the success of the conference to the fact that the United States was the proposer and chief mover therein and that it was held in Washington.

We feel it incumbent upon us to tender our thanks to the United States for having employed her immense influence for good. The settlement of the Shantung question was due to the help of Great Britain and the United States and largely aided by the atmosphere of the conference. China has received much benefit from the conference.

Yomiuri, 11 February.—England the Gainer.

For its many things accomplished the conference has been called a success. But the naval treaty and the Four-Power Entente are no guarantee of international peace. Therefore it is a questionable peace.

Great Britain has been the largest gainer at the conference, cultivating her friendly relation with the United States, substituting the Quadruple Entente for the Anglo-Japanese Alliance without hurting the feelings of Japan, and keeping the naval strength of the United States down to the level of her own. Securing the good will of China by restoring Wei-hei-wei (no longer of value to her).

The United States comes second to Great Britain in point of success. She has secured a 40 per cent naval superiority over Japan, her potential enemy, and regained the good will of China.

France comes third, through securing a voice in Pacific questions, vitally effecting her international position.

China is next to France in her attainments. She, aided by United States and Great Britain, made Japan yield on the Shantung question and compelled the Powers to conclude treaties and agreements favorable to her interests. She lost nothing and gained a great deal.

The most miserable is Japan. She has gained a breathing space in naval competition by the enforcement of the naval holiday and this is a considerable boon to her. But the days of her unrestricted freedom of action are at an end. The California questions are left unsolved, the pressure of foreign capital is on the increase, and the clandestine movements of foreign missionaries in Korea are growing brisker. These factors may cause enmity and hatred between America and Japan in a few years. Our people should carefully gauge the results of the Washington Conference.

Jiji, mild pro-Government organ, 15 February.—Defence of Delegates.

There are all sorts of criticism circulated about the diplomatic results obtained by the Japanese delegation. If it is agreed on all hands that the conference itself was a great success, the achievements of the delegates can not be overlooked. The conference has achieved what has never been done before, that is, the reducing of armaments, guaranteeing peace in the Pacific, and the disposal of Far Eastern problems.

Yorodzu, 15 February.

This paper loudly denounces the Government for its ever-yielding policy in connection with the conference. The Foreign Minister during interpellations in the diet stated that in order to ensure peace in the Pacific Japan's claims have been abandoned, not only in the naval ration, which was absolutely essential for national defense, but of the actual issue involved in the fortification of the Pacific and the questions of cables in the territory under Japanese mandate.

By this proceeding at the conference, the Government practically acknowledged the truth of the charge in vogue in America and England (before the conference met) that Japan was an aggressive power in the East.

This journal claims further that Count Uchida inadvertently let slip remarks to the effect that "Japan, at the Washington Conference, disported herself so as to do America and England grace." This most effectively betrays the mental attitude of the Government. It is essential, continues the newspaper, that in some form or other it should be made known that the decisions reached at Washington are not consistent with the general will of the Japanese people, since the fall of a mere Government does not make up for diplomatic blunders.

This paper bitterly declares that the Washington Conference has been of success for America, rescuing her from the international isolation threatened because she threw overboard the League of Nations, and enables her to exploit economic resources in the Far East while American continent is under the lock and key of the Monroe doctrine.

Yomiuri—liberal Organ, February 15—Hollow treaties.

This paper is very pessimistic in its valuation of the accomplishments of the conference. Its work must be valued on the standard of how long it will serve to guarantee peace in the Pacific. The naval agreement is certainly advantageous in lightening National burdens.

Japan Chronicle, 15 February—American and British Gains.

America has killed two birds with one stone, having secured assistance for China and freed herself of the supposed danger of China being controlled by Japan on the other.

Thus America enhances her political and economic position in China. While Britain gained less, she will be enabled to maintain her old position in China.

Japan's gain is limited to being freed of suspicion and misunderstandings by other nations and having the way paved to some extent for minimizing the estrangement between China and herself.

H. I. J. M. S. "MUTSU."

17 February, 1922.

In general the ship was well kept. The top side and fire and engine rooms were spotless, but the crews' quarters and passageways left much to be desired. The living quarters, both officers and crews, were very much overheated and a foul odor pervaded them. The crew itself was immaculate, although in working clothes, but lacked the smartness of sailors, resembling rather mechanical, heel-clicking soldiers.

The officers' quarters are spacious, light, and well furnished. Sufficient additional quarters, conference rooms, etc., having been provided for a flag officer and his staff.

The crews' quarters are badly chopped up, due to gun and torpedo compartments and other small divisions. The lighting and ventilation is not generally good, and there is really not adequate living space. Hammocks, bags, rain clothes, etc., are stowed in metal racks in nearly all living compartments.

There was nothing of special interest or value in the gallery, bakery, pantries, sick bay, etc.

The heating and ventilating system closely resembles that used in light cruisers, i. e., electric blowers forcing air over steam coils before discharging it to the various parts of the ship. Only two intake trunks (hatches about 4 by 6 feet) and sets of blowers were seen. One hatch is on the superstructure deck, just forward of No. 1 stack, the other on forecastle-deck level, just forward of the mainmast. The blowers and steam coils are on the gun deck, directly under the supply trunks.

All electric wiring was open. The larger leads are leaded cable and smaller ones are plain. So far as could be seen the wiring is equally distributed on both sides of the ship and the leads are all run together, along fore and aft bulkheads, and secured close to the deck above.

The secondary battery guns and deck torpedo tubes are in closed compartments. In general, there are two guns in a compartment, but in some cases only one. None of these compartments were entered, and all observations had to be made in passing the door. There is one endless chain ammunition hoist in each compartment; these can be operated both by hand and electricity. No fire control voice tubing was seen in any of these compartments or any where else in the ship except under the forward bridge, where one long lead of 3 to 4 inch flexible tube was stowed in a rack. There is, however, a very extensive system of telephones throughout the ship, and it was stated that they alone are used for fire control. However, the accompanying officers were caught in so many false statements that this one could not be accepted as absolutely true. Battle orders and

ranges are communicated to each gun from the central station by electrical indicators.

There is a fire-control station on the first platform above the after bridge, in and abaft the main mast. Whether this is a secondary control station or the secondary battery control station could not be learned, but it is believed to be the latter. No voice tubes were seen, but there is one panel containing eight telphones. This led to the belief that the secondary battery was divided into six sectors, four forward (two on each deck) and two aft, and that the two inboard telephones were either for the antiaircraft guns or deck torpedo tubes, probably the former, as there is no torpedo director stand located here. However, the only officer who would talk insisted that the secondary battery is divided into four sectors and that the guns on both decks forward are included in one sector, each side.

The turrets were not entered, but the following observations were made from outside: Inside and to the rear of Nos. 1 and 2 (but not 3 and 4) are range finders, the ends of which protruding through the turret sides are heavily armored. The range finders also extend slightly above the turret roofs, giving the roofs a perceptible bulge all the way across.

The hoods for periscopic sights are on the turret roof outboard of each gun. There is a third hood on each turret roof more than double the size of the other two. This is to the left and rear of the left gun pointer's hood and said to be the trainer's hood. It is oblong with the long axis making about a 30° angle with the breech of the gun. It is big enough for a man to get his head in and opens along the outboard side, affording a view of considerable horizon.

A very neat and compact ex-caliber gun (about 2 inches) is secured by saddle and bands to each turret gun. The ex-caliber guns are capable of a sort of tangent screw adjustment in place.

Previous reports on antiaircraft guns are correct in all respects. There are on the same deck with them, but further aft, two antiaircraft loading machines (one on each side). There is one endless-chain ammunition hoist for each pair of antiaircraft guns.

The four gun-deck torpedo tubes are each in a separate compartment. The athwartship dividing bulkheads between these compartments are almost tangent with the afterside of No. 2 stack, and not forward of secondary guns, as previously reported. The torpedo tubes (21 inches) have a 45° angle of train from bow to beam. The torpedoes, like those on light cruisers and destroyers, are discharged by compressed air.

There are two reloads for each deck tube. Both are in their racks and no additional racks are provided. One officer stated that two reloads were also carried for each submerged tube.

The number and location of all magazines is not known. There are numerous magazine vents abreast the turrets, but in addition four magazine vents are on the forecastle, two each side, slightly abaft the hawse pipes. These seemed so far forward that a special point was made to ascertain that they were not oil-tank vents, which are easily distinguished by size and shape.

The front and sides of the conning tower are curved; the after end is flat. It is, as near as could be estimated, of 14″ armor. It has ample room for at least 8 people. The slits are approximately 4½ inches wide inside and 3 inches to 3½ inches wide outside and 16 to 18 inches long. They are located as follows: one dead ahead, one on each bow, one on each beam, and one on each side of the flat after end, affording an unobstructed view to almost dead astern. Their size and location is such that the steersman in the center of the tower has a good view of nearly the entire horizon from quarter to quarter. There was one repeater compass and wheel in the center, and numerous 3 to 4 inch voice tubes and telephones around the sides of the tower. The top of the compass is too low for taking bearings, and no other means is provided.

The navigating bridge is on top of the conning tower and extends back through the mast. The wheel is over the center of the conning tower; directly forward of it is a magnetic compass, used as a steering compass. This was the only magnetic compass seen in the ship.

The gyro repeater is mounted on a platform, raised about 2 feet, directly in rear of the wheel, the height permitting its use for quarter to quarter bearings. There are two other repeaters in the after wings of the bridge for flag or commanding officer use. There are two small navigating range finders on the bridge; a 1½-meter one on a stationary base abaft the forward repeater, and a two-meter one mounted on a cage platform that can be run on deck tracks to either side of the bridge. On each side of the bridge were two telescope sockets for submarine sector lookouts. Around the forward side of the bridge were numerous revolution indicators and engine control instruments, additional communication with the engine and fire rooms being by both voice tube and telephone.

At the base of the mast are three emergency cabins—one for the admiral, one for the captain, and a third for two staff officers. There is also an excellent chart house and an auxiliary radio room for use underway. The principal radio room was not seen.

There are no ship-control facilities on the after bridge. Except for chart house, an athwartship track, similar to the one on the forward bridge, for either a range finder or searchlight (that was not mounted), and a few voice tubes and telephones, the bridge was bare.

The central tube of the foremast is armored and an electric elevator runs from the top to the central station. The platform just under the yardarms is completely inclosed by metal, except for a narrow open slit all around and near the roof. This inclosure is said to contain a range finder.

Between the mainmast and No. 3 turret is a deck house, containing the blacksmith shop, the top of which is a range-finder platform.

The range finder, in position there, was estimated to be about a three-meter one. With the exception of the one that can be mounted on the after bridge, this is the only range finder that can bear directly astern.

At no place in so much of the ship as was seen was there any indication of either wireless phone or radio compass installation, and both of these were diligently looked for.

There are four firerooms—three with 6 boilers each and one with 3 boilers, making a total of 21 boilers. Fifteen burn oil exclusively and 6 burn both oil and coal. The firerooms are on one deck level and there is no communication between them. There are two means of entering each fireroom—one a small electric elevator capable of holding only two men and the other a very small trunk. The assistant engineer officer who accompanied us on this part of the visit was either woefully ignorant or an accomplished liar, and, although he spoke English, few intelligent answers could be wrung from him.

The outside appearance of the boilers differs slightly from that of light-cruiser and destroyer boilers. They are completely lagged, even the manhole ends of steam and mud drums. Each boiler has seven burners, five in lower and two in the upper row. No burners were seen, but it is quite evident, and admitted, that the only means of connecting is by bolting to the flanged end of the burner fuel line. These bolts are threaded and there is no means of clamping to the burner. The valves on the burner fuel lines, as well as on all other fuel lines are under the floor plates and were not seen. The oil pressure carried could not be learned. There are no air registers around the burners; the air is regulated by the opening of the "ash pan" doors. It was stated that seven inches air pressure is carried. The blowers could not be seen, and it is believed they are at the ends of the firerooms.

The two fuel-oil pumps are in the center of each fireroom, one on either side of the center line. Each pump is said to be capable of supplying all six boilers and only one pump is reported to be run at a time. There are no fuel tanks in the firerooms and no fuel-oil heaters were seen. Neither could any oil piping be seen. It is assumed, however, from the location of the pumps, that both pumps discharge into one manifold, between them, from which the main fuel feed line is led fore and aft to the centers of the middle boilers,

where the lines branch and are carried along the fronts of the boilers. There are no air banks at the ends of the fuel lines (at least none visable above the floor plates) to keep the burner pressure evenly regulated.

There are no oil drip pans under the burners. When asked what provision was made for extinguishing an oil fire the assistant engineer stated by water and, if necessary, sand. When asked if he thought an oil fire could be extinguished by water he said yes. All manner of questioning failed to reveal that he had the faintest knowledge of foam extinguishers and none could be seen anywhere.

Two hours is the normal time allowed for bringing the boilers from dead to full head of steam. The assistant engineer didn't know what was the least time required to safely get up steam, but stated that to do so in one hour would only occur in case of an emergency. So far as could be learned there is no set time for keeping the boilers closed to cool off. The oil consumption and water rate could not be learned for any speed. All observations in the fireroom were made in a few moments from the floor plates, neither time nor an opportunity being afforded to walk about, and consequently other important and interesting details could not be properly taken in.

There is one electric elevator, two-man capacity, leading to the engine room. No other means of access were seen, but there surely must be some.

The most striking feature of the entire ship is the appalling size of the one and only engine room. There isn't the semblance of a bulkhead anywhere in this enormous space and consequently the ship is pitifully vulnerable. They have for once really out-Japanesed themselves. Having cut up all the rest of the ship into minute watertight subdivisions and then put every bit of important machinery, except the dynamos, into one huge compartment.

The machinery is arranged so as to give a great amount of unobstructed floor space, but its arrangement might possibly be criticized from the point of safety and economical operation. At the extreme forward end of the engine room three main air pumps were seen (one for reserve) placed athwartships. If there is a fourth it was not seen. These are about five feet below the level of the engine room floor plates. Just abaft the air pumps and outboard of them are four reciprocating circulating pumps, two on each side. The circulating pumps are on the engine room floor level and consequently five feet above the air pumps. The main engines are in the after end of the engine room. This necessitates long leads to the air and circulating pumps. All the machinery and piping except the main air and hydraulic pumps (the former extending across the forward end and the latter across the after end of the engine room) is located out-

board and not far from the sides. The floor plating around the turbines is about four feet above the main level (middle section) of the engine room. This gives an appearance to the engine room of being built on three levels.

There are two operating panels, carrying all gauges, etc., one on each side, just forward of the wing (low pressure) turbines, and well outboard. They run fore and aft. Immediately inboard and abreast the center of these panels are the wheels for operating the maneuvering valves. The wheels are horizontal. There is one ahead and one astern wheel, both connected to a single rod, for the two turbines on each side of the ship.

The space outboard between the circulating pumps and operating panels is taken up by smaller auxiliaries. The center of the engine room from the air pumps to the turbines is clear, except for the elevator just abaft the circulating pumps and a spacious sound-proof box just forward of the maneuvering wheels.

The turbines are Brown-Curtis, built at Yokosuka. The reduction gears are Westinghouse (purchased abroad). The gears for both shafts of a side are in one casing. They are directly abaft and below the turbines and also somewhat below the main level of the engine-room floor.

Each set of turbines for the two shafts of a side consists of a high pressure, low pressure, and backing turbine. The high pressure is inboard, the low pressure and backing turbines are in one casing and outboard. Both turbines of a set are alongside of and very close to each other. In lifting the casings there will be much difficulty in working between turbines.

There was no time to follow out the steam leads, except from high to low pressure, which contained no valve, and as the officers apparently did not understand, it was impossible to learn how either of the turbines is cut out.

At the extreme after end of the engine room, above the level of the turbines, are two sets of hydraulic pumps for turret power. These are very large horizontal pumps requiring almost the entire width of the engine room. Two small hydraulic booster pumps are located on the gun deck, one under the forward and the other under the after turrets.

The main air, fuel oil, and feed pumps are Diehl. The circulating pumps are made by a Japanese commercial firm, but are of unknown design. It was impossible to get close to any other auxiliaries, but the pumps were stated to be principally Diehl.

It was impossible to obtain a word of information about warming up and securing practices, how long air pumps are run after securing, vacuum carried, temperatures of overboard and feed-

heater discharges, etc. The engine room inspection, like that of the fire room, lasted only a few moments and consisted of walking from one end to the other and back again.

The dynamos are in a separate room that was not inspected.

An inspection of one vidette launch revealed no special fittings or equipment for towing torpedoes alongside.

The *Mutsu* has no fittings for torpedo nets, and will not be equipped with them. The *Nagato* is equipped for nets.

No provision whatsoever has been made for laying mines.

The captain stated that at high speeds the vibration aft is bad, making the cabin and stern gallery quite uncomfortable. He also stated that the ship is unusually steady in a seaway, but very wet. That she buries her nose and plows under the seas.

FIELD MARSHAL PRINCE YAMAGATA (His death and its effect on the Japanese nation).

17 February, 1922.

The three following opinions, regarding the results that will follow Prince Yamagata's death, appeared in the Nichi Nichi of February 2, 1922. They are of considerable interest for numerous reasons. Each one appears to contain a certain amount of truth but all show a bias due to party views.

Irrespective of all previous protestations to the contrary they are naïve admissions of the sweeping control the Prince wielded over the army and the Government.

It is the first public admission in years of Admiral Count Yamamoto's power, which has never ceased to be great, but this office believes that, although the feud between Choshu and Satsuma might be fought more openly, the admiral will be content to continue to direct from behind the scenes and will never again resume active public life except in the event of a national calamity.

The army and Yamagata's lieutenants mourn his loss because their power fades with him. The students and younger intelligencia welcome his death as Japan's great fortune. They mourned the death of Marquis Okuma. If the truth be told the loss of both is, from a foreign point of view, the gain to Japan.

In the recent death of Premier Hara, Japan lost her only strong man in active public life. While he lived Prince Saionji's power grew with Hara's as Yamagata's weakened. To-day Saionji is left with more actual power than any other man in Japan. He is Seiyukai-Bureaucratic and the army's power is almost certain to wane for if he leans either way it will be toward the Satsuma Clan.

The Kenseikai and Kokuminto parties haven't even a second-rate man in their midst. The present premier, Takahashi (Seiyukai) is a stronger man than either of the other parties can muster and his way is clear for several years of fairly peaceful leadership, while the other factions cast about for a real leader.

The three opinions are:

Seiyukai (Government Party).

The death of Prince Yamagata is certain to have a wide effect in political circles, such as did not follow the death of the late Marquis Okuma. Yamagata exercised a direct influence upon affairs of state while that of Okuma was indirect and less powerful. Prince Yamagata was the recognized head of the military bureaucracy and the head of the powerful Choshu clan, the hand of which was in evidence in all political maneuvering.

The militarists will now, undoubtedly, seek for some new leader upon whom the mantle of the late prince may fall, but, in the opinion of the Seiyukai leaders, such a man is not to be found. At least there will be none who will stand head and shoulders above the rest as Yamagata did.

The bureaucracy of the future will probably be led by Viscount Hirata and Viscount Kiyoura, who were most prominent amongst those lieutenants of Prince Yamagata and amongst those intimately associated with him, while the militarists are expected to rally under the banner of General Tanaka, the former minister of war, the militarists and Choshu strength being synonymous in this case. Baron Den, governor general of Formosa, is expected to take up a part of the burden laid down by Yamagata.

What the future holds for the Seiyukai can not be guessed by those consulted by the Nichi Nichi, but that it will lack much of the solidarity given to it by the Yamagata leadership is taken for granted.

Kenseikai (Opposition Party).

It is believed that the death of the late prince will have small direct effect politically, although it seems agreed that the influence of the Choshu clansmen has received a disastrous blow in the loss of the great leader. The political effect of the death of the late Marquis Okuma will be greater than that of the death of Prince Yamagata, the marquis being a leader along the lines of democracy, which Japan has been following, while Yamagata was a leader in the reactionary lines, which Japan has been discarding.

The Kenseikai expects to see the work of the late prince carried on by Viscounts Kiyoura and Hirata and General Tanaka, with the first named succeeding the prince as President of the Privy Council. No one of the three, however, deprived of their famous leader, will succeed in even partially filling his place. To sugges-

tions that the Choshu faction will rally behind and give strength to General Tanaka, it is pointed out that the former minister of war of himself had no power at all, being strong only in that he was acting for Prince Yamagata, whose main strength, in turn, came from the fact that he had the ear of the Emperor.

The power of the Choshu clan passes with the death of Yamagata, there being no Choshu statesman of outstanding prominence or strong determination, while the end of the Choshu ambition to hold Japan under a strict militaristic rule and bureaucratic administration will probably mark the dawning of a better system and the extension of the Imperial Constitutional Government. If the Choshu leaders who are left would abandon wholly the policy of the late prince, they might yet wield strong influence, but the Kenseikai has no idea that any of the leaders now will have the acumen to see this and grasp the opportunity.

The Kenseikai invites the people of Japan to turn their keen attention to the Satsuma clan, headed by Admiral Count Yamamoto, and including Viscount Makino, the Minister of the Imperial Household, and Marquis Matsukata, one of the two remaining "genro" and Lord Keeper of the Privy Seal. The keen rivalry that has existed between the Satsuma and the Choshu may now result in the former replacing in influence the party whose great head has gone.

The main political effect of the death of the prince, therefore, in Kenseikai opinion, will be a strong struggle by the Satsumas to replace the Choshu, and the people are warned not to permit such a clan struggle to detract their attention from the main points in the government of the country.

Kokuminto Party.

Kokuminto opinion is that the death of Prince Yamagata clears the way for the formation of a Tokugawa ministry, the foundations of which have been well laid and the main obstacle to which has been the opposition to Prince Tokugawa, of the Yamagata faction. This, and the fact that Admiral Count Yamamoto will probably seize the opportunity in an attempt to ride into power again at the head of the Satsumas, resulting in a "cat and dog" conflict between Yamamoto and Tokugawa, is the main effect to be expected from Prince Yamagata's death.

The possibility of a coalition government, under Baron Mayor Goto, such as has been spoken of, is now regarded as very much lessened.

The death of the prince will give all the parties a chance to enhance real party organization for support of a real party government, which will be a great blessing to those seeking an extension in constitutionalism.

JAPANESE TARGET PRACTICE (H. I. J. M. S. "KONGO").

Source: Reliable.

2 February, 1922.

About the end of October, 1921, the *Kongo* (C. C.) held individual long-range target practice in Sagami Bay.

Range 15,000 yards. Speed increased during firing from 14 knots to 24 knots. Target was towed by another battle cruiser on steady course, parallel to firing ship, at same speed as firing vessel. Target dimensions were 240 feet long by 72 feet high.

Three shots were fired from each gun, 24 rounds in all, and four direct hits were made.

LACK OF POPULARITY OF JAPANESE NAVAL SERVICE.

2 February, 1922.

In the middle of October, 1921, the navy department issued calls for 160 students for the Naval Academy (Etajima), 120 students for the Engineering School (Yokosuka), and 30 students for the Paymasters' School (Tokyo). By the end of December the names of only 30 odd applicants have been received for these three schools.

This pronounced lack of popularity of the naval service has been the cause of much concern.

Similar experience is being met with in voluntary enlistments and the naval stations have resorted to intensive illustrated poster campaigns.

JAPANESE AVIATION PILOTS.

2 February, 1922.

At first neither the French instructor on duty with the Japanese Army at the Tokorozawa Aviation School, nor the British instructors on duty with the navy would commit themselves, as they probably felt it would be a reflection of their method and manner of instruction. Since then—in fact very recently—more friendly and intimate relations have been established between the assistant for aviation and the British and French instructors, and long conversations have been had with both. Information obtained from both was practically identical, and the substance of it is as follows:

That the Japanese make average pilots, and that it takes slightly longer to train them than for the European or American student.

That they are exceedingly courageous and exhibit no fear, but in emergencies lose their head completely.

That some of them are very good—a very limited number however—and can fly all types of machines and perform all kinds of stunts, but are all more or less mechanical fliers.

That even the best of the Japanese pilots never attain the degree of proficiency reached by the above-average foreign pilot.

That the Japanese aviation mechanicians are very poor in comparison to foreign mechanics, and upon the adoption or use of motors or planes of new types are practically lost until they are instructed in every detail. That the mechanics have no mechanical sense.

In considering the above information it must be kept in mind that the Japanese pilots are in no sense "picked men," and that practically none of them have ever operated a motor-propelled vehicle before reporting to the aviation school.

Both the British and French instructors agree that the Japanese Air Services must not be underestimated as fighting forces, but when the question was asked as to whether they would prefer meeting in battle with a Japanese or a European or American squadron, they both stated they would take on the Japanese in preference.

Major Brackley, a former British pilot, who is now second in command of the mission teaching the Japanese Navy, stated that nine Britishers, who were here setting up the *F–5* boats which the Japanese Navy purchased from England, had left for England on January 10. Five of the boats were completely set up, and the other three were well enough along so that the Japanese could finish them without help.

He also stated that the contract of himself and the rest of the British aviators with the Japanese Navy expires about March 15, and that to date they have received no news as to whether it will be renewed or not, although they have tried to get a definite answer.

Since the mission of which he is a member has been here, they have instructed a class of 16 naval aviators, and are now well along on the second class of about 20. A great percentage of the first class had had previous training.

He complained of the Japanese mechanics, and stated the Japanese were not agreeable to teach, as they would freeze onto the controls and just when you had them where you thought they were going to make an excellent pilot they would go completely to pieces. Also, that after a few hours of instruction they thought they knew everything there was to be learned.

He stated that the Japanese seemed determined to have a real air service, and were willing to spend any amount of money to get it, and predicted that the next ten years would see a remarkable improvement in both personnel and equipment.

Only one Japanese pilot had been turned loose on the *F–5* boat, and, although he had shown great promise, he crashed on his first or second trip.

NOTE.—The pilot referred to in the last paragraph has had more flying experience than almost any other naval pilot. Up to December 20, 1921, he had crashed three times in the *F–5* instead of once, as stated above.

JAPANESE CONDUCT COLD WEATHER TEST FOR SUBMARINES AND AEROPLANES.

2 February, 1922.

On December 11, 1921, the *Wakamiya*, with eight planes on board, left Yokosuka for Mamiya Straight (Saghalien) in company with submarines *Nos. 24* and *27*. The purpose was to conduct cold weather tests with both planes and submarines. The results of these tests have not been learned.

It will doubtless be of interest to know that submarine officers and crews are required to live on board at all times, even while submarines are lying at navy yards from November to March. (While lying at yards the crews eat on board a tender or some other vessel.) This results in much sickness, especially pneumonia and tuberculosis, and causes a great deal of discontent among the enlisted personnel. The result is that men are continually trying to get out of submarine service. These men are difficult to replace as the service is voluntary. After three years' service in submarines men are awarded medals.

The complement of submarine *No. 10* is 2 commissioned officers, 1 warrant officer, and 17 enlisted men; that of *Nos. 38* and *39* is 3 commissioned officers, 2 warrant officers, and 30 enlisted men.

When one warrant officer only is assigned to a submarine he is usually a gunner; when two are assigned one is a gunner and the other a machinist.

JAPANESE PLANNING SUBJUGATION OF FORMOSA.

Source: Reliable.

2 February, 1922.

A determined subjugation of the savage tribes in the interior of Formosa is definitely planned. Certainly the situation has reached a point where some such action must be undertaken. Ever since the influenza epidemic of two years ago, which the savages ascribed to the bad magic of the Japanese and Chinese, there has been an incessant guerilla warfare along the guard line the whole length of the island. One attempt was made last year to bombard a savage village from an airplane, but the aviator, being obliged to descend behind the guard line, was killed and beheaded and his airplane demolished. This blow to their prestige may have not a little to do with the plan of the Japanese constabulary to carry out a thorough bombardment by airplane as a preliminary to a campaign of subjugation. News-

paper reports state that the constabulary has 11 planes, but reliable sources indicate that there are 22.

Another reason for this campaign is undoubtedly the desire of the government general to develop the immense mineral and timber resources in the area now held by the savages, comprising nearly two-thirds of the island.

JAPANESE AIR SERVICE AT ARMY GRAND MANEUVERS.

2 February, 1922.

At the grand maneuvers, 1921, the First, Second, and Fourth Aviation Battalions, one balloon company, three naval seaplanes, and four airplanes participated. After the first day of the maneuvers the kite balloon was damaged and was not in ascension thereafter.

The missions carried out by the aviation assigned to the two opposing forces were reconnaissance, pursuit, bombardment, and, on the last day of the maneuvers, ground harassment. The flying was uniformly good, but extremely cautious and conservative—a reflection of the instruction of the French aviators on duty with the Japanese Air Service. Only three accidents occurred and no one was seriously hurt. No formation flying was witnessed during the maneuvers, but on the day of the review by the Crown Prince which immediately followed the maneuvers, 42 planes attempted a formation that was very loose and straggling and indicated lack of training in this phase of flying.

The aerial combats witnessed exhibited either lack of instruction and practice or lack of faith in the structural integrity of the airplanes. The former is believed to be the correct interpretation.

No photographic missions were carried out, as there was no photographic equipment of any kind with the different units.

Numerous bombing missions were carried out, but as smoke bombs were dropped through a tin chute, and as the planes were not equipped with bomb racks or bomb sights, it was impossible to arrive at any conclusion to the state of perfection in bombing.

No attempts were made to communicate with ground troops, and as the infantry was not equipped with panels or flares, there was no communication from ground to airplanes.

It is understood that attempts to communicate with divisional and higher commanders by wireless was not very successful, but two division commanders stated that they had received very valuable information from airplanes by means of dropped messages.

No attempts were made to protect reconnaissance or bombing missions with pursuit planes.

The aviation units were assigned to the armies and not to smaller units.

No airships were used during the maneuvers.

Assignments of missions were made personally by the commanding officer of the units and reports were made by the pilots and observers to him in person. No "Plan of employment of air service" had been drawn up before the maneuvers and no daily "Operations order" or "Operations report" was published.

At the maneuvers approximately 70 airplanes and 1 kite balloon participated, apportioned as follows:

Caudron *G-4* (bi-motored)	3
Maurice Farmans, 100-horsepower Daimler motor	21
Salmson *2A2*, 260-horsepower Salmson motor	21
Spad, 220-horsepower Hispano-Suiza motor	10
Nieuport, 15-meter, 120 le Rhone motor	12
Farman *F–60*	1
Seaplanes, *Yokosuka*	3
Observation balloon, French Type R	1

No airships were used.

All the planes were in very good condition and approximately 75 per cent were in commission throughout the maneuvers. All were well-equipped with flying instruments, most of which had been made in Japan. None of the planes had either front or rear machine guns, and there were no synchronizing gears seen. Seven or eight British type camera guns were mounted on planes. No cameras or photographic equipment was seen, nor was any plane fitted up with a camera mount.

Three aviation battalions, the first, second, and fourth, and one balloon company, participated, in addition to several planes from the Army Aviation School at Tokorozawa. Each aviation battalion consisted of two companies—each company being equipped with nine planes, as follows:

First Aviation Battalion, 1 company, 9 Nieuports; 1 company, 9 Spads.

Second Aviation Battalion, 1 company, 9 Maurice Farmans; 1 company, 9 Salmsons.

Fourth Aviation Battalion, 1 company, 9 Maurice Farmans; 1 company, 9 Salmsons.

Balloon company, 1 French type R kite balloon.

Naval seaplanes used in bombing, 3 Yokosuka (Japanese).

Army Aviation School (Tokorozawa), 3 Caudron, *G–4*; 1 Farman, *F–60*.

Of the above-named planes, all except the Spads, Caudrons, and the Farman *F-60* were made in Japan. Practically all of the motors had been purchased abroad, although a few may have been

Japanese copies of foreign motors. Practically all of the propellers were of Japanese manufacture. All motors seen were equipped with Bosch spark plugs, and a mechanic at one of the airdromes stated Bosch or Dixie magnetos were used almost exclusive in the Japanese air service.

On the two temporary airdromes visited there were about 50 individual white canvas hangars. On each of the two airdromes there were two machine guns mounted on tripods for use against aircraft. At one of the fields there were two 75's in addition. At this same field there were two audiphones for detecting enemy aircraft. Both had been purchased from the French.

Supplies were transported by auto trucks.

At the two airdromes inspected during the maneuvers, four 1½-ton trucks and three motorcycles and side cars were seen at each place.

Two temporary airdromes, where the First, Second, and Fourth Aviation Battalions were located, were visited. On one field one Salmson and three Maurice Farmans had wireless equipment—on the other field three Calmsons and three Maurice Farmans were equipped with radio. The equipment had been purchased in France and was the same type as French planes used during the war. On each airdrome a sending and receiving station were installed—French "Type Militaire." "Modele 1916" being used. Very little success was achieved with wireless during the maneuvers. There was no wireless telephone equipment seen. Infantry was not equipped with panels or flares. Artillery regimental headquarters had panels out as did divisional and higher headquarters. One observer was seen with a Very pistol, but planes were not seen communicating with ground troops by this means. Airdromes were connected by telephone with army headquarters, and it was by this means that results of reconnaissance and other missions were made known to those in command. Two divisional commanders stated they had received very valuable information from planes by means of dropped messages.

DISTINGUISHING MARKS FOR NAVAL AIRCRAFT, JAPANESE NAVY.

17 February, 1922.

1. The distinguishing mark for naval aircraft will be a red ball (national emblem).

2. Marks will be painted upon aircraft as follows:

(*a*) *Aeroplanes.*—The upper face of the upper wings and the face of the upper wings; also on both sides of the body. In case the lower wings are very short, the mark will appear on the lower face of the upper wings; also on both sides of the body. In case there is no body, the marks will appear on the sides of the seat frame.

(*b*) *Airships.*—On lower side, near the forward end; also on the upper face, middle part, and on both sides.

(*c*) *Moored balloons.*—On both sides, middle part.

(*d*) *Free balloons.*—On both sides, middle part.

3. The specifications above given show the method of marking, in general, which often will vary according to the shape and construction of the craft.

In case the color of the aircraft is such that the above-mentioned marks will not show clearly, the portion around the mark will be painted white.

JAPANESE DESTROYERS TO BE USED AS TARGETS.

17 February, 1922.

Japanese Destroyers to be Used as Targets.

The *Akebono* and *Oboro* (old coast destroyers), which were sticken from the Navy List on 1 December, 1920, have already been dismantled and are to be used as targets.

It has not yet been learned, however, for what type of target practice they will be used. This is the first record of old Japanese vessels being used as targets.

JAPANESE ARMY AVIATION NOTES.

17 February, 1922.

Army Aviation Notes.

The "Kokuseiin" a government institution, has announced to the public that they will offer prizes for the invention of a "magnet ignition apparatus for airplanes." The invention must be in the hands of the authorities by October 31, 1922. A prize, for the best invention, of $3,000, and for the second best, of $1,500, is offered.

The aviation bureau of the Japanese Army has announced to the public that the Japanese Army has decided upon the official adoption of the following planes for the purposes set after their names:

23m. Nieuport (A–1 type), LeRhone 80 horsepower, training.
18m. Nieuport (A–2 type), LeRhone 80 horsepower, training.
15m. Nieuport (A–3 type), LeRhone 80 horsepower, training.
15m. Nieuport (no type given), LeRhone 120 horsepower, pursuit.
Spad (G–1 type). Hispano 220 horsepower, pursuit.
Salmson (B–1 type), Salmson 230 horsepower, daylight reconnaissance and bombing.
04. Caudron (E–1 type), 2–80 horsepower LeRhones, training.
Farman F–50 (B–2 type), 2 Salmsons, night bombing.
Farman F–60 (D–2 type), 2 Salmsons, night bombing.
Span-Herbemont (C–2 type), Hispano 300 horsepower, pursuit.

The Japanese have arbitrarily designated the different airplanes by type numbers, such as A–1, A–2, etc., as can be seen from the above.

The Japanese only claim 230 horsepower for the Salmson motor, and while this may be true of the Japanese copy of the Salmson, the French-made motor develops between 250 and 360 horsepower.

OPINIONS OF FOREIGN OFFICIALS IN JAPAN REGARDING THE OUTCOME OF THE WASHINGTON CONFERENCE.

2 February, 1922.

The following opinions on the outcome of the Washington Conference, in so far as Japan is concerned, have been gathered up by the naval attaché and the assistant naval attaché.

They are independent opinions, in no way influenced by the views of this office, although they coincide with the opinions expressed in the many cables and letters of the past six months.

At the *German Embassy* the opinion is that Japan has emerged from the Washington Conference successful beyond her fondest hopes. Her delegates went to Washington as to a day of reckoning, prepared only for a defensive campaign, planning and expecting to struggle for the minimum concession on every point.

They are returning to their country having not only avoided costly and humiliating sacrifices, but having obtained recognition and concessions of the greatest moment to their present and future. They were able to transfer their planned defenses into successful objectives.

The naval agreement secures to Japan more than she could have gained by the completion of the 8–8 program, which was beyond her means.

America's agreement to the status quo in Guam removed all possibility of the United States effectively applying force in the Far East.

Unless the chaotic affairs of Europe are quickly adjusted a general collapse will take place and Japan will again, as during the World War, find herself with a free hand to pursue her traditional policies on the Asiatic Continent without interference.

The *Dutch military attaché* states that Japan has accomplished at Washington all, and far more, than she hoped for. Guam was her preoccupation. Could America be persuaded to agree to disarm that island or to maintain the status quo there, then naval reduction and the restoration of Shangtung and the evacuation of Siberia and the question of the return of north Saghalien would be more than compensated for.

Guam being necessary for an American operation against Japan, its relinquishment as a great naval base leaves the United States

helpless to bring any real pressure upon Japan, no matter what happens in the Far East.

The *French naval attaché:* Junior naval officers and the enlisted men, together with the class represented by the clerks, are discontended with the result of the conference. There is reason to believe that the Government officials are well satisfied, but they invariably state that they are disappointed at the results.

Guam constitutes a very real success achieved by the Japanese.

The *Russian naval attaché:* The superior officers of the Japanese Navy are very reticent in regard to the Washington Conference, as they are loyal to their minister who is representing their country and their service in America.

The junior officers are discontented on account of the loss of their careers. The mass of the people are not very much interested, except in the hope that armament limitation will mean cheaper rice. The Government is content, holding that Japan has not been restricted as to the future.

The *British naval attaché:* At the Washington Conference Japan gained everything and lost nothing. America gave up everything, every advantage she possessed. By consenting to retain the status quo in Guam the United States has sacrificed the power to use the southern route to Japan and must approach from the north.

Guam was Japan's main objective. Japan is much gratified at the outcome of the conference.

The great achievement of the conference lies in its having brought America and England together and in the realization brought home to both countries that neither one of them can hereafter take effective action in the Far East without the assistance of the other.

JAPANESE POLICY TOWARDS SIBERIA.

2, February, 1922.

The Sixteenth Infantry Brigade (Fifth Division), consisting of the Seventeenth and Fifty-second Infantry, recently went to Vladivostok for the purpose of relieving the time-expired men of the Eleventh and Thirteenth Divisions. Recruits were left behind for training, so these organizations are below strength. No announcement of this movement was made by the Japanese War Department and it would appear that an attempt was made to keep it secret from the outside world.

It is of interest to note that, despite Mr. Hanihara's statements at Washington concerning the intended withdrawal of troops from Siberia and Saghalien Island, the extraordinary Naval expenditures for 1922 carry the following items: Dispatch of warships to Vladi-

vostok and vicinity, ¥1,690,000; dispatch of warships to Saghalien district, ¥1,610.000; dispatch of warships to Kamchatka, ¥830,000; for temporary defensive schemes in a Saghalien port, ¥1,300,000; for investigation of Saghalien oil fields, ¥1,500,000.

SECRECY REGARDING JAPANESE SUBMARINES.

Source: Lieut. Comdr. H. Reuterdahl, U. S. U. R. F.

6 March, 1922.

The following is an extract from a letter by Mr. Maurice Prendergast, editor of Jane's Fighting Ships, which may be of interest:

The conference put no limit on light cruisers, destroyers, and submarines. The Japanese shipyards are absolutely devoid of any mercantile contracts and are living on Government subsidies plus naval contracts. Stopping capitol ship construction, they say, would mean turning 60,000 workpeople adrift. I hear that they are working still on two battle cruisers (*Amagi*, *Akagi*) condemned by Washington, but purely to give employment and to get the ships advanced up to the bare launching stage. After being launched they will be left alone. Admiral Okada, of the Japanese Construction Bureau, says that, if capitol ship building is stopped, they will have to advance the programs of light cruisers, destroyers, and submarines to keep the yards working. *It is the Japanese submarine program that keeps me awake o' nights.* It's a subject very much "wropt in mistery." The Japanese Admiralty refuses to give us any information on the subject; on the contrary, *we have caught them sending us spurious and misleading information.* There was a table published recently by our Admiralty for information of our House of Commons on submarines built and building. It shows that Japan has 20,500 tons more of submarines completed than we can muster from "Fighting Ships" details. Also that she has a very large number of big boats—certainly 24 if not more, equal in size to your S classes—in hand.

THE SEA AND JAPAN.

Source: Vice Admiral G. A. Ballard, C. B.

(The following is taken from the last chapter of the book entitled "The Influence of the Sea on the Political History of Japan," by Vice Admiral G. A. Ballard, C. B. The author received the Third Class of the Japanese Order of the Sacred Treasure for his services in connection with the Anglo-Japanese Alliance. The chapter entitled "Conclusion" and is the opinion of one kindly disposed toward the Japanese nation. A British view, however, is interesting.)

"Japan stands now well-nigh impregnable to direct attack, as a result of great natural advantages of position combined with success in war and wisdom in diplomacy. Surrounded by the Pacific Ocean, which has once again become her great guarantee of safety because she has learned how to use it as a line of defense; separated by 10,000 miles of water from Europe and nearly 5,000 from America; and having no greater military neighbor near at hand since the break-up of the Russian Empire, her situation is such that no power in the world can seriously threaten her in her own regions in the near future at least. For any attack on Japan as matters now stand the enemy must be in possession of a fleet about three times as powerful as that of the defense, because no other country has a fully equipped modern naval base and arsenal in the eastern Pacific capable of docking two or three of the largest battleships simultaneously; or of removing guns 100 tons in weight; or manufacturing wholesale supplies of heavy-caliber ammunition; or, lastly, of storing the millions of tons of oil fuel required by a twentieth-century fleet in war. Without such a base in easy reach a large proportion of the attacking fleet—probably a third—must constantly be at some distance from the theatre of operations; while the force actually on the spot must always be twice as strong as the defense if any effective watch or blockade is to be possible.

No power exists at present in a position to undertake such a task. The one potentially vulnerable section in the Japanese strategic position is her Korean land frontier, which, like the British frontier in India, requires defense by an army dependent on sea communications and can not be held by sea-power alone. But until that joint in her harness is threatened by a first-class military power firmly established in Asia, and independent of the sea for keeping its army in the field—such as Russia was in 1904—its security can not be seriously disturbed.

As matters stand at present, therefore, Japan is practically safe against aggression while she maintains an efficient fleet. And although she will certainly offer a determined opposition to any policy injurious to her vital interests, her own policy is not based in aggressive intentions toward others; for even if the Japanese were inclined to indulge in dreams of conquest such as inflamed the German mind prior to 1914, they are quite sane enough to realize the madness of attempting to attack any civilized State in Europe or America. For these reasons peace may be regarded as well established and likely to endure between Japan and all civilized powers, for no war can take place if neither side assumes the offensive. It is true that a certain class of alarmists, with little knowledge of naval affairs but a rich endowment of nervous imagination, persist in regarding a conflict between Japan and the United States as one

of the probabilities of the not very remote future. But surely such a view is not very complimentary to the intelligence and self-control of two great peoples. Theodore Roosevelt never agreed with it, and no man was ever in a better position to judge or more ambitious for the good of his own country. Causes of friction may undoubtedly exist, but none lying beyond hope of settlement if reasonable forbearance is exercised on both sides.

A section of Japanese public opinion is aggrieved because their countrymen receive different treatment as regards residence in the United States to Europeans, and claim an equality on the grounds that Japan is a member of the League of Nations. At first sight this resentment may seem natural, but they should study history, which will teach them that the roots of this matter lie far deeper than in the nicely balanced theories of international lawyers. Racial differences are inborn and constitute a factor in human affairs that can not be abolished by speechmaking round a conference table at Geneva. To ignore their existence is to depart from practical politics in settling international relations. It is not a question of the superiority or inferiority of this people or that, but simply a question of fundamental difference of mentality and social instincts. The Japanese need fear comparison with no race in the world as a nation of virile, courageous, and high-minded men, exercising a greater influence on human progress in their own quarter of the globe than anyone else. In their patience, industry, and indifference to enervating material comfort their standards are above those of most other lands. But four-fifths of the population of the United States are of pure European extraction, and history makes it abundantly clear that Europeans and Asiatics are so constituted that they can never inhabit the same country in peace unless one or the other occupies the position of an inferior race. Even when Europeans of different racial origin, such as Teutons and Slavs, are living in the same area in large numbers, the political conditions are nearly always unstable. These plain lessons should make it clear to anyone that a wholesale Japanese emigration to the United States would be as bad for Japan as for America, involving the Governments of both countries in constant anxiety unless the emigrants frankly accepted a subject position such as that of the Greeks and Armenians under Turkish rule or the negroes of the Southern States of the Union, which Japanese self-respect would never allow. The same applies to Australia. The vast emptiness of that portion of the British Empire is one of the most regrettable and disappointing features of our time, but British enterprise hoisted the Union Jack in southern latitudes at a period when the Japanese were declining to move a step beyond their own shores, and the small population which does inhabit Australia's

southern fringe are Europeans who could not exist in harmony in the same country with any people of non-European origin.

But this racial exclusiveness must be recognized as holding good in both directions if the world is to remain at peace. Political practices of the Monroe doctrine type, although based entirely on self-interest, can not without a violation of the most elementary principles of morality and justice refuse to other countries the advantages which they insist on for their own. If Europe, America, and Australia are all reserved for the interests of populations of European origin, then the interests of Japan must in common equity be allowed to prevail in eastern Asia, which is their own quarter of the earth's surface. If the Japanese were a hopelessly retrograde and incapable people, obstructing the spread of civilization, it might be otherwise, but they are not. Japan will not doubtless exercise in the course of time a beneficial influence on the coasts of the northwest Pacific, comparable to that exercised by Great Britain in India and France in North Africa, and she has every reason to claim that her political, military, and economic interests, which have already been expressly recognized by Great Britain and Russia as paramount in Korea, should be recognized by all States as paramount throughout the Far East.

Forbearance must be exercised in that direction if peace is to be maintained; and should commercial temptations prompt any other country to thwart Japanese aspirations in areas where the Japanese are more vitally concerned than anyone else, the sympathy of every right-minded man should lie with Japan. Under such provocation the Japanese could not be expected to submit without forcible protest, nor would they be deserving of respect if they did. And the aggressor will be faced with a most formidable task if he persists in enforcing his policy. Apart from the great distances separating Japan from other continents—which exercise a potent influence in keeping the peace in themselves—the natural geography of the northwest Pacific confers important strategic advantages on Japanese defensive requirements. The chain of islands forming the Empire covers the sea approaches to eastern Asia from Vladivostok to Shanghai in a manner somewhat corresponding to that in which Great Britain covers the sea approaches to northwestern Europe, and no military or naval expedition can get past this natural barrier if Japan offers resistance, unless with great risk and difficulty. It was this advantage of position that enabled Togo to make fairly certain of intercepting the Russian fleet before it reached its destination.

These considerations would seem to point inevitably to the conclusion that the north Pacific is not likely to carry the rumble of

heavy gunfire in our time if self-control and reasoned sense prevail among the leading powers of the world. Moderation, restraint, and political sagacity enabled the elder statesmen of Japan to lead their country in the early steps of its progress from a position of no importance to a place in the front rank. It may sincerely be hoped that their successors in the years to come will remember that excellent example. And if the responsible directors of foreign policy in any other land are tempted to interfere unreasonably with Japanese predominance in Eastern Asia they will do well to recall the fact that it was the uncompromising insistence of St. Petersburg on the pursuit of a course detrimental to Japanese interests in those regions that ended in sweeping the Russian flag from the eastern seas and Manchuria and pulling it down from the ramparts of Port Arthur, although not until Japan had exhausted every effort of diplomacy in trying to meet Russia halfway. If the day should come, nevertheless, when diplomacy fails again to settle some question in which Japan considers herself vitally concerned, then the influence of the sea on her history will once more play an all-important part. At present Japanese naval policy relies on the very largest form of battleship as the instrument of sea power, but it is at least an open question as to whether the greater part of the money thus spent would not be better invested in the form of submarines, for Japanese waters are particularly well suited to the operations of that type of vessel on account of their great depth, which precludes the possibility of submarines being "mined in" as they were in the North Sea. With a couple of hundred of these craft as a defense no foreign battle squadron would ever likely be able to approach her coasts or attempt to enter the Yellow Sea. But whether the battleship or the submarine is the implement in use, it is on the men who handle it that everything depends in the end, and in the human element of security the Japanese are well provided.

Nobody is likely to controvert the warning issued by the Russian commander in chief to his men before sailing to meet them in battle, that "the loyalty of the Japanese to their throne and country is unbounded. They do not suffer dishonor and they die like heroes."

Japan lies in the Pacific Ocean, which earned its name from its comparative freedom from the war of the elements, and if reason prevails in politics may earn it in a double sense by its freedom from the wars of mankind. But if civilization fails once again to keep men from wholesale massacres of each other, then that great expanse of blue water may become the highway to one of the most sanguinary racial conflicts that ever convulsed the world, from which the victor is likely to emerge in little better condition than the vanquished to whichever side the fortune of war may ultimately incline.

ANTI-AMERICANISM IN MEXICO.

4 February, 1922.

There has been a marked recent tendency on the part of the Mexican press to publish articles tending to influence resentment of the irresponsible parts of the population against Americans. Special featuring has been given to the alleged unjust execution of Mexicans in the United States, to the imprisonment of Mexicans in United States jails for no other cause than that they were out of work, and so forth. A frequent instance was the publication of a series of pictures appearing in the comic supplement of El Heraldo of 2 February, 1922. One copy of this supplement, together with a translation of the legend appearing in the pictures, is forwarded herewith. The paper practically suggests the lynching of American children in revenge for some corresponding alleged crime against a Mexican in the United States.

ADDRESS BEFORE OPERATIONS CONFERENCE.

Source: Capt. L. A. Cotten, United States Navy, late Chief of Staff to Senior Naval Officer in Turkish Waters and American High Commissioner.

16 February, 1922.

Of course, as you all know, when one comes back from foreign duty, or duty such as I have been on, the question is rather what not to say than what to say. This is due to the fact that the people have grown tired of the unsettled conditions of the Near Eastern situation and take it as a matter of course, as they do not get the accurate accounts through reading the newspapers. I desire to run through briefly and give you the actual situation as it exists politically and touch on a few other features and then the conference can ask questions.

Starting with Greece [indicating on map] and going on up. Greece is suffering so from her war with Turkey in a financial way that it may be said she is on the verge of another revolution. Of course, it may not come for several weeks or months, but it will come. Probably the reason that it has been deferred is that the people can not decide on a substitute for King Constantine. They do not want King Constantine, neither do they want Venizelos, the former Greek Premier. I came home on a Greek ship and had quite a talk with the captain; in the midst of the conversation I said "You have increased your revolutions," whereupon some of the Greek passengers jumped up and asked where the revolution was, in Athens or Philippopolis. This just shows the attitude of the Greek people.

In Constantinople itself, the Allies are still in occupation. They have a small army there, the total not being greater than 25,000 men. All they do is to make an effort to insure the safety of Constantinople. They have very complete plans in case the Nationalist Army in Anatolia makes an attack, and they also have very complete plans for certain lines in case they come in. They consider the situation delicate enough to always have these plans up-to-date. In case of an attack, on account of the enormous hills they have there, they could make it very disagreeable for anybody attacking them.

As we go around the Black Sea we come to Bulgaria, which country is in the best condition of any in the Near East. They went to work immediately after the war and almost immediately had a large amount of wheat to export, and they are still working hard. When the different commissions and other forms of inspections that the French have put on their neck ease up and they can get rid of them, they will recover very rapidly.

Roumania is almost, I consider, the negligible quality of the Near East. The people are unstable in every way, morally, politically, etc., etc., and do not seem to care what happens to them. It is all very interesting.

In Russia, you are all probably familiar with the stories of famine, which they continually keep up. In Constantinople we were constantly in touch on account of the refugees coming out of there. The situation could not be worse. Just before I left, a woman of the upper class, who had just gotten out, told of some of the stories in the interior and they were so appalling, it is horrible. That is Odessa where she came from. We have had several destroyers in various ports in South Russia since the relief started and the Navy has been able to render very comfortable assistance to the American Relief Administration.

Going on around, the situation in the Caucasus is a little better. In Georgia, Azerbaijan, and Armenia, they are trying out a modified form of Soviet Government, probably what represents a gradual change in the form of government in Russia. Russia has not the nominal hold of these parts but she is the actual directing force, although they have shown a modification of the Soviet form of Government from that which they have in the interior, and we know this to be a fact because we got a copy of a letter from Lenine which showed he was the directing force. These people saw that they could not go on under Lenine—they respect certain fundamental rights of property and persons. We have a lot of our people in this part of the country and they feed a lot of them. Also our business men are beginning to come in there. Recently, we have had a business concern go in there and took over a large part of the business that formerly had been in the hands of the Italians.

As we go on around, the real interesting portion is undoubtedly Anatolia. There the Nationalists, with the capital at Angora, control all the country around here. In there, at the present time, there is no active fighting of importance. The Turks are getting ready for a big offensive in the Spring. They are going to drive the Greeks out of Smyrna then. If they don't do it then, they will do it later, but they are going to do it. The morale of the Greeks is getting very low and the thing that they are trying to find is, how they can get out without injuring themselves. The Turks at Anatolia have a remarkable government in certain respects. The most remarkable thing about the whole government is that, so far as I know, it is the only revolutionary government that has never gotten out one dollar or one cent in coinage. They are using the money of the regular Turkish Government. They have showed brains by absolutely refusing themselves to put upon their country the enormous burden of a large amount of paper money.

We recently had in Cilicia a most interesting situation. The French have turned back to the Turkish Nationalists, Cilicia, which is just north of Syria. It has stirred up the people there to a very great extent. The Greek population assumed that the French were in there forever, therefore the situation of these Greeks is rather precarious. Now the French are getting out and turning the country back to the Turks. The people get very panicky and the question is what to do with them. Our high commissioner took the stand that we would not evacuate Americans simply because of a change of local government—that so far as America was concerned, we were not partisan and that we would stick—told them we were not afraid of any of them. This was brought about by an argument that the Americans were going to evacuate with other Christians. It was brought out that if we begin to run from the Turks in one place, we will have to run from the rest. There were probably 35,000 taken out and they were suffering very much. Some had been taken to Cypress.

The British, as you probably know, have had considerable trouble and enormous expense in Mesopotamia, and I look forward to the time when England will have to get out of Mesopotamia entirely, in so far as political matters are concerned. Of course, she will retain as complete business control as is possible. Admiral Bristol stated that they must have some plan before he could consent to refugees being taken out under the guidance of America. Of course, he could not give orders to American civilians—he merely advised them and I am sorry to say that his advice was not always followed.

Now as regards social conditions, starting at Constantinople, we find there a most complex situation, because there is no part of the

world in which there is such an intermingling and overlapping of civilization, of races and religious sects as in Constantinople. I have never seen anything like it. It is almost literally true that if you stop on Galata bridge you would meet at least one of every nationality passing you—makes the place very spectacular to look upon. The refugee situation there is such as to make it not only difficult, but actually dangerous, as not only the Turkish refugees come in, but also the Russian refugees, the Greek and Armenian refugees, etc., and the place is absolutely overrun. However, due to the American Red Cross and the attitude taken by the committee of which Admiral Bristol is at the head, they have actually worked out a great many troubles and moved a large part of the Russians to other areas where there was a better opportunity to make a living. The American Red Cross, in many instances, would spend money to find these people a job, rather than merely feeding them as objects of charity. There were very few jobs for them in Constantinople. The Russian refugees have worked down from 140,000 to 40,000, and are working down still further every day. The Turks are a very proud people and they don't parade their suffering. We know the same situation exists with them as it does with the other refugees, but it is not so apparent.

The whole question of the Near East situation out there is one that is very difficult for the people outside of that part of the world to get a clear view of. If you will recall the fact that everything that you have read on the Near East bearing on either the Christian or the Mozlem races, everything that you have ever read from histories to short-story magazine articles, has been written by a Christian. Whether it was intentional or not, almost all stories of that kind are colored with the Christian viewpoint, and if you will stop to think if the Mozlem would write a history of some of our Christian countries of 200 years ago and would have the same motives and relate some of the acts that took place in some of these countries as he saw them, it would be colored with the viewpoint of the Mozlem. So all these stories that you read are colored by the viewpoint of the Christian. Obviously this is not the correct viewpoint. One has to live out there and discount a certain amount of it to get the actual situation. After he has read and seen for himself, he can better judge the situation.

There is no part of the world in which intrigue reaches a higher development than it does in Constantinople. It has an enormous influence on the political activities of the people and on the activities of their agents abroad, and I don't hesitate to say that intrigue has a bigger influence there than in any place or part of the world. A great deal of this stuff is sent out for propaganda purposes. The people that get it out themselves don't even believe it. In some

cases a condition that arises is not as bad as pictured. After you get out there you have to guard against anything that a native tells you, and it should be taken very lightly until you have confirmed it. Almost everything that they tell you is given for some ulterior purpose, and you must check it up if you want to know the truth. The people of the Near East do not understand the difference between falsehood and truth. The consequence is that it makes it very difficult to get the actual facts in certain situations, and we have come to the plan that we never believe them thoroughly until we have seen that it has been reported by some foreign eyes; therefore, we have to wait sometimes quite a little time to get the actual situation. This, briefly, is the social condition.

For a great many years the brightest political minds have been attempting to resolve the Turkish Empire into its constituent parts, and it must be apparent to anyone at all familiar with the subject that the chief resolvent has been self-convinced. The parts that have been severed from the Turkish Empire in the last 450 years have been the causes and scenes of more wars than all other subjects during that time. It would seem to the naval officer that this system must be inherently wrong, changing slowly by the results. However, when the Allies made the Treaty of Sevres they attempted to follow out the same system that they did before. America was in no way connected with this Treaty. It seemed as though the powers thought that this was the last chance to take their share of Turkey. They overstepped themselves. Nobody, not even the Allies themselves, had ever ratified this Treaty. Sooner or later, they have got to come together again and draw up another Treaty, and it is very important when this Treaty is drawn up that there be an American representative there to look out for American interests. He should take no part in it except to look out for the interest of all Americans over there. This matter has been put up to the State Department very strongly by Admiral Bristol. Our rights were entirely disregarded there the last time, and it must not happen again. You might ask what our rights are—we never went to war with Turkey, but we have certain definite Treaty rights, and we must have representation to uphold them. The allied high commissioners have tried on various occasions to assume to themselves the authority of a de facto government in Constantinople. It has been only with a great deal of effort to get them to observe our rights out there. The high commissioners of the Allied Powers seem to be slowly urging the point of realizing that our rights in Turkey must be respected.

Now as to what the navy has to do in the Near East—there are many questions that are constantly arising that have their center in Constantinople. The question of the evacuation of Cilicia—there was a situation that was remote from Constantinople, and the only

thing to do was to take the captain of the destroyer in and tell him what the admiral's policy was in evacuation of Americans, etc., and tell him to go down there and sit on the job and keep him informed as far as possible.

The situation at Samsoun we have always had with us. Going down a little on the Black Sea, at which the greater part of the Turkish tobacco is marketed, there is an interesting situation. Eighty per cent of all this tobacco comes to America. We spent fifteen or sixteen million dollars there last year.

Every so often, generally every few weeks, the Greek fleet goes up in the Black Sea and comes in these little places and bombards them. It terrorizes the people to a great extent, and they are very panicky. We always kept two destroyers there with a regular plan of action. When the Greek fleet appeared off Samsoun a single destroyer stood out to meet it. The other destroyer began preparations to remove Americans from Samsoun. The Greek admiral was then asked for time to remove American civilians before any bombardment began. This was always granted, whereupon the American commander would explain the situation on shore as affecting the Greeks, there being ten or fifteen thousand Greeks on shore that would probably be very severely treated by the Turks, even if they were not killed in the bombardment. In consequence of this little bit of diplomacy, the Greek admiral would always go away and has never yet bombarded Samsoun.

Occasionally some of our ships were fired on—a destroyer was fired upon in the Sea of Azov. The *Galveston* was also fired upon at Noverisk, but it was not intentional, and after the regular apologies the matter soon blew over. These occurrences never got out for publicity. It is very cold up there and the sea is very rough and the work very strenuous. We always relieved the destroyers so that one destroyer would not continually get the bulk of the work.

In addition to the ordinary work of handling the various situations, the Navy out there is handling, and has handled since the armistice, the entire communications of the American business and relief people. There is no other way for messages to get from Samsoun and other Black Sea ports except by the destroyers. We always have a ship stationed in the Bosporus, but the headquarters are at Constantinople. Of course, when we send messages for anybody not connected with the Navy we always get reimbursed. The American business men and others have shown their appreciation of our service to them. This matter of communications has been a vital one for our business houses and relief institutions. Since war is still on between Greece and Turkey, code messages are not accepted for transmission abroad, even to countries reached by the cable. Conse-

quently we send all proper messages as desired by American firms and institutions. Of course, they pay the regular commercial rates for this service, but it is of incalculable benefit to them to be able to get their messages through at all.

Admiral Bristol has done a wonderful work in encouraging and assisting in the development of American business interests in the Near East, and our business in that part of the world, despite the disrupted conditions, has increased enormously since the armistice, and I feel that we are getting in a position to play an important part in the business of the Near East as soon as the political situation in that part of the world allows business to resume its natural course.

SPANISH BUILDING PROGRAM.

6 February, 1922.

The Spanish Navy Department is now considering plans for the construction of six new submarines, two light cruisers, and one destroyer leader, under authority of the bill which recently passed the Cortes.

All of these vessels will be built by the Sociedad Española de Construcción Naval—the submarines and destroyer leader at Cartagena and the light cruisers at Ferrol.

The tentative proposed characteristics of the light cruisers have already been reported. No plans have as yet been prepared for the destroyer leader, but it is thought that it will be a vessel of about 1,600 tons displacement.

Plans for the submarines are being considered. They are of about 800 tons displacement, with double hulls, two Augsburg Deisel engines of about 900 horsepower each, four bow and two stern torpedo tubes, and one antiaircraft gun.

An interesting feature of their design is that the Spanish naval authorities insist on their being tested for submergence to a depth of 80 meters (262 feet). They lay great stress on the danger to submarines from depth bombs and require this additional strength of hull for protection against that form of attack.

VLADIVOSTOK.

Source: Commanding Officer U. S. S. "Albany."

10 January, 1922.

Conditions Vladivostok and environs quiet.

The cabinet of the local government has resigned. It is difficult to determine the reason as both the Government and the cabinet were strongly pro-Japanese.

It may be that the government, realizing that it was becoming very unpopular with the masses, requested the resignation of the cabinet so that a new cabinet having the support of the people could be selected.

The Japanese have the support of the president of the local government in their effort to secure the control of all passenger cars (their operation, repair, and upkeep) on the line from Pogranitchnaia to Vladivostok and from Vladivostok to Habarovsk. The Japanese are to have free use of Russian shops for repairs and are to use Japanese workmen to effect repairs.

This really means that the Japanese are endeavoring to get control of these lines. In fact, every step taken recently both in the military operations and the commercial activities strongly indicates that the Japanese are endeavoring to close the doors of Siberia to foreign trade and investment.

The following report was received to-day from a reliable Russian source:

I had a conversation the other day with a Russian connected with the Japanese secret service here. According to her personal observations and opinions expressed by the secret service men they are after criminals of all descriptions.

They do not trace or bother about Bolshevicks any more, but, on the contrary, Japanese are trying to find a way to get on good terms with the Bolshevicks.

The Japanese hate and fear the Americans uppermost, and the main work of their secret service for the present time is to watch Americans, their activities and doings here.

The Americans are very shrewd, the Japanese say they have plenty of money and they are trying to line up the Chinese to fight us, but, thanks to Chan-so-lin-, and his friends, China is not going to fight Japan. If America should want to fight Japan she will have to do it herself.

The Russian officers engaged in the Japanese secret service are being treated very badly by the Russian people. They are openly despised by the Russians and called the traitors of their country, that they are no good to any country.

Due to the holidays, there has been very little in the press of a political nature. The Japanese-controlled press, however, never loses any opportunity to try to create suspicion and distrust in the minds of the Russians and Chinese as to the sinister imperialistic motives of America toward Siberia and China.

There is more and more evidence that the Russian-controlled press is friendly toward America. The United States is considered the real and only friend of Siberia and China. The real Russians are preaching to the people to stop civil war, get together, and drive out the invaders (Japanese).

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 5—1922.

15 MAY, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1922.

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 5—1922—15 MAY, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

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DIGEST OF BRITISH PERSONNEL.

25 March, 1922.

The British naval census for 1 March, 1922, gives the following numbers:

Navy and marine corps (officers and men) (of which about 14,600 are marines)	118,500
Coast guard (officers and men)	2,900
Total	121,400

The naval attaché radioed on March 24, 1922, that the following numbers indicated the strength to which the British navy planned to reduce its force by the end of March, 1923, the reduction being gradual during the coming year:

Navy:	
Flag and commissioned officer	4,200
Midshipmen at sea	580
Warrant officers	2,100
Petty officers and men	74,000
Boys at sea	2,450
Boys in training (ashore)	4,500
Naval cadets	640
Total	88,470
Marine corps:	
Marine officers	400
Marine enlisted men	9,400
Total	9,800
Grand total	98,270
Reserves (Jan. 1, 1922):	
Officers	10,332
Men	38,808
Total	49,130

NOTE.—35 oilers, 1 repair ship, 1 supply ship manned out of this force.

	Officers.	Men.	Total.
Colonial navies:			
Canada	(?)	(?)	[1] 1,500
South Africa	(?)	(?)	[1] 400
Australia	501	4,188	[2] 4,689
New Zealand	(?)	(?)	[1] 700
Total			7,289
Aviation:			
At home (Jan. 1, 1922)	3,067	27,813	30,880
In India (Jan. 1, 1922)	1,500	3,000	4,500
Colonial aviation:			
Canada	(?)	(?)	253
South Africa	(?)	(?)	50
Australia	25	150	175
New Zealand	(?)	(?)	50
Total			35,908

[1] Estimated. [2] Known.

NOTE.—The proportion of the air force assigned to naval activities is not definitely known, but it is considered to be one-third of the total.

Present (Mar. 25, 1922) active British Navy and marine personnel not including reserves.

Present British Navy, officers, men, and marines	121,400
Colonial navies	7,289
One-third of the aviation personnel	11,969
Total	140,658

Active British Navy and marine personnel, not including reserves proposed by March 31, 1923.

British Navy and marines, officers and men	98,500
Colonial navies, officers and men	7,289
One-third of the aviation personnel	11,969
Total	117,758

NOTE.—There is no information of the number of men in the naval communication service, naval recruiting service, and Royal Indian Marines.

DIGEST OF JAPANESE PERSONNEL.

1 January, 1922.

	Officers.	Men.	Total.
Commissioned	4,709	73,252	77,961
Midshipmen and naval cadets	1,544	.....	1,544
Warrant officers	2,835	.....	2,835
Total	9,088	73,252	82,340

There are no marines in the Japanese Navy. Air forces are included in the above numbers. The Japanese Navy Department proposes to cut her officer personnel by 500 and her enlisted personnel by 5,000. It is not known whether this is to be commissioned officers,

midshipmen, and naval cadets, and warrant officers, or to be distributed among the three classes.

Navy personnel proposed but not yet publicly announced.

Officers	8,588
Men	68,252
Total	76,840

NOTE.—This total is sufficient to fully man every Japanese ship built which she is permitted to retain under the treaty and to fully man every ship she can complete by July 1, 1922, and still leave 35 per cent of her total personnel available for shore establishments, aviation, and training.

PERSONNEL REQUIRED.

The estimated number of men to fully man every ship Japan will be permitted to keep under the treaty and to man all ships building that will be completed by July 1, 1922, is as follows:

Type.	Number of ships.	Number of men.
Dreadnoughts	6	7,751
Battle cruisers	4	3,920
Predreadnoughts	2	1,672
Armored cruisers	6	3,867
Light cruisers	21	8,128
Destroyers	98	9,706
Submarines	39	1,343
Mine layers	5	2,814
Coast-defense ships	2	600
Airplane tenders	2	850
Gunboats	9	1,190
Submarine tenders	2	400
Repair ships	1	300
Tankers	8	800
Transports and cargo ships	8	945
Survey ships	2	200
Total		44,576

BRITISH AND JAPANESE BUDGETS.

25 March, 1922.

British:

British total estimate for naval establishments proposed subsequent to Geddes report $285,488,280

(British pound reckoned at $4.40.)

Japanese:

Budget passed February 14, 1922 ..... $196,831,288

(Yen reckoned at $0.50.)

Unofficial reports state that savings resulting from Washington treaties will be used on cruiser and submarine construction and improvement of dockyards.

BRAZILIAN NAVY—LONG-RANGE TARGET PRACTICE.

Source: U. S. Naval Commission to Brazil.

1 February, 1922.

When the question of the target practice of the battleships came up, we were told that the Brazilians would first hold a short-range practice, to be followed about one month later by a long-range practice. While we were invited to attend both practices, it was evident that, as it was their first really competitive practice under modern rules, they would prefer we did not witness the short-range firing. We did not push the matter, and I have understood, both from the officers in the general staff and from the officers on board ship, that the first practice was very successful, the *Sao Paulo* averaging 85 per cent of hits in very good time and the *Minas Geraes*, which has had very little drill, owing to her long overhaul in New York, averaging 55 per cent of hits with slower time. The practice was carried out very similarly to ours, with check-sight observers, observers for sight setters, etc., and the results of the firing were very carefully tabulated and analyzed.

When it came to holding long-range practice, little was said, but we were finally notified three days before the practice when and where we were to embark and to what ships we were to be assigned. I still felt that the officers of the general staff would prefer we would not attend, but I found on the *Sao Paulo* that the young officers there were most enthusiastic about our attending, and they said so many times during the day. They felt that they had had their initial instructions on board our ships, and that they had worked conscientiously and were as well prepared as it was possible for them to be.

The practice was held on the 31st of January, and we embarked in a launch from the arsenal at 8 o'clock sharp. One officer went to the *Minas Geraes* with the minister's party, while we went to the *Sao Paulo* with the subchief and two engineering rear admirals and the younger Brazilian officers going as observers. We were met at the gangway by the commanding officer and I was immediately struck with the lack of excitement and confusion and the seamanlike manner with which the routine was carried out. These ships get under way very few times a year, and this was their first competitive long-range practice, but one would have thought that they were only receiving a board for inspection of a drill in the harbor.

The signal to unmoor was made about 9 o'clock and the two battleships slipped their moorings and proceeded to sea. This part of the maneuvers was not well done. The ships were slow in getting clear of the buoys and slow in taking station. The distance must have been fixed at 900 meters, but it varied from 600 to 2,000, and apparently very little attention was paid to station keeping.

The training ship *Benjamin Constant* and a destroyer were already under way and they took station as observing ship and range boat. The torpedo boat *Goyaz* acted as tender to the *Minas Geraes*.

The ships stood directly to sea until they reached the point where they were to change course for the run and then stood down the range, the *Minas* firing to port on the run out and the *Sao Paulo* firing to starboard on the run back. The target was a low rock, on which two masts had been mounted to serve as points for taking range-finder readings. These masts, however, were too small, and with the background of green mountains they could not be used. No canvas target was spread and there was no painted point of aim. I made no inquiries, but if one of the masts was to have been used as a point of aim it was soon found to be an impossibility, as the masts could not be seen.

I was asked to take station in the plotting room, which was in charge of Lieut. Eleazar Tavares. I can not speak too highly of the high state of efficiency of this link in the chain. There was no excitement, no unnecessary moving around, no nervousness, and the practice went off just as smoothly as if it were only a drill. This especially impressed me, as the room was small and very hot and there were four observers there, including one rear admiral. To give an example of the confidence that Tavares had in his personnel, he turned to me a few minutes before the ranging shots and laughingly said: "Range finders report they can not see the masts, so we will have to use the navigator's instruments for our initial range, but that makes no difference." Then, during the firing he turned to me and said: "Spot reports that the last two salvos were straddles, so I guess we have the *Minas* beaten." After the run, as it was very hot, he dismissed his men and it happened that fire control wanted a couple of tests of telephone circuits, etc. Tavares threw in and pulled switches, etc., and carried on a conversation with me at the same time, showing that he was absolutely familiar with every detail of the wiring, connections, etc.

After the run, when I congratulated him, he said: "It was due entirely to the drill and instruction I received in your service. We all feel that you are our instructors and teachers and if you are pleased with the results we feel more than repaid." This same sentiment was expressed by the directoscope officer, the spotter, and the fire-control officer himself. The latter said that they had not tried to introduce any innovations, but for these practices had held absolutely to a system which they knew had been proven successful.

The sea was very smooth and I was surprised that they attempted director firing, but they did, and while I was told they missed an occasional roll they fired entirely by director. There were several ragged salvos, but this was due to the directoscope key being held

too long in a very small roll. I was told that it was the intention to augment the roll by the use of the rudder, but I do not think this was attempted.

As far as I could see there were no casualties in the fire-control system on the *Sao Paulo*. On the *Minas* one sight setter took his telephone off and kept his sight always at zero. He is now in the brig awaiting court-martial. Tavares told me that he wished there was some way of automatically synchronizing his Sperry instruments as he does not trust them. I could not get him to say why. I will take this up with the bureau of ordnance.

The ladder system was used in the ranging, single rounds at first followed by two gun salvos. There was a misunderstanding somewhere in the initial ranges set on the sights so that no saving of ammunition resulted in the employment of this system and there certainly was a loss of time. The total time for the *Minas's* run was about 17 minutes and for the *Sao Paulo* 9 minutes. The *Sao Paulo*, however, fired her salvos in good time—five shots in about six minutes. The *Minas* straddles the target on several salvos, and I understand that the *Sao Paulo* straddled on at least three out of four salvos.

The range averaged about 13,000 meters and with reduced charges this necessitated firing at about extreme elevation. While I did not have glasses to spot the fall of shots while the *Minas* was firing, I am sure the dispersion in range was at least as great, if not greater, than ours. I mention this as the *Sao Paulo* had small dispersion when carrying out her experimental firing with our fleet.

The *Minas* had a very large dispersion in deflection. My first impression was that they were not using the target-bearing transmitter but that the trainer was attempting to keep his vertical wire on some ill-defined point of aim, but on inquiring I found I was wrong. It is evident that the trainers were not well drilled in this method and were very careless. The lateral dispersion was at times fully 400 feet.

After the turret runs the ships lay to for lunch and at 2.30 started the secondary runs. On these runs the range of the *Sao Paulo* varied from 7,000 to 3,000 yards, and they were made in three legs, firing one quadrant while approaching the target, two quadrants while the range was more or less steady, and one quadrant while opening the range. Five rounds per gun were allowed and the official times for two of the runs were 1 minute 35 seconds and 1 minute 36 seconds. The *Sao Paulo's* salvos were sharp and much more rapid than those of the *Minas*, and the only run of the *Minas* that I saw seemed very poor. One gun fired with point-blank range on every salvo and the dispersion seemed unreasonably great.

A rain squall stopped the firing about 5 o'clock and we stood in toward the harbor. About 6 we stopped and stood on very slowly until after supper, when the ships stood in. My personal opinion of this maneuver is that it was to give the minister and other observers a view of the entrance of the harbor at night.

The *Minas* missed her buoy for some reason and anchored for the night, but the *Sao Paulo* made hers and moored in fair time. Shore boats came alongside at once and all observers left the ship.

Since the practice very little has been said to us about it except that the inspector of target practice requested that Jackson and I submit a brief criticism of the practice as conducted.

The inspector of target practice told me he was very sorry that the air force did not witness the firing and that they did not get to photograph the fall of shot but that the chief of staff would not issue the order. From the way he spoke I took it that the admiral was afraid that the machines might be struck. I understand rake observations were taken, but I do not know whether photographs were taken or not. An official photographer took pictures of the ships while firing.

While on the *Sao Paulo* the executive officer showed me a printed routine book the officers had made. It was complete to the minutest detail and rather a large book. Both the executive and the other young officers remarked that the older officers were the ones who were preventing any systematic advancement in training, and that they could not understand why the younger officers were so insistent on drilling all the time. Personally from my observation on this firing I am all the more convinced that Commander Spears was right when he said that the most important thing for the commission to do is to persuade the Brazilians that they need a complete reorganization of their navy department. But I also believe this will be impossible until they have a foreign naval commission here that has the support of the President and Congress and is fully backed by law.

This target practice was the first step toward future advancement and it may be followed up next year by other practices.

To-day I heard that the only casualties to material during the firing were a broken rammer, which was quickly cleared away and the gun loaded by hand for the remainder of the run, and a casualty to the gas check seat on one of the 12-inch guns which developed the day before the firing. By special permission this gun was not fired, but the opposite gun in the same turret was allowed to fire the total ammunition allowance for that turret. I am sure that fire-control instruments, telephones, bells, buzzers, lights, gas-ejecting apparatus, etc., all functioned satisfactorily on the *Sao Paulo*. On

our way from the plotting room to the quarterdeck after the run we passed the four British gunnery sergeants and they said that everything had worked satisfactorily.

BRITISH SUBMARINE DISASTERS.

Source: Naval and Military Record.

29 March, 1922.

It is a lamentable fact that the spring cruise of the Atlantic Fleet has in two years in succession been marred by the loss of a submarine with a considerable toll of life. On January 20, 1921, the *K–5* sank with all hands (six officers and 51 men) at the western approach to the channel.

Last February, while a submarine flotilla was exercising with the battle fleets, a submarine of the *H* class had her conning tower torn off, but as the water-tight hatch held, the crew were able to get her into port without casualties.

On June 27 last year submarine *K–15* sank at Portsmouth, but those on board succeeded in escaping, and the vessel was subsequently raised.

It was on October 18, 1919, that *H–41* was sunk, lying at Blyth Pier (Northumberland), a ship's engines being started for test purposes, with the result that the submarine was struck by the propeller.

Peace-Time Accidents.

The following is a list of some previous submarine disasters in peace time:

March 18, 1904.—Submarine *A–1* sank with all hands near the Nab Light.

June 8, 1905.—Submarine *A–8* sank outside Plymouth breakwater, when 15 lives were lost.

October 16, 1905.—Submarine *A–4* lost off Portsmouth after a collision.

May 10, 1909.—Submarine *C-11* run down and sunk by a merchantman off Cromer.

February 2, 1912.—Submarine *A–3* run down and sunk by H. M. S. *Hazard;* 14 lives lost.

October 4, 1912.—Submarine *B–2* run down and sunk by liner *Amerika* off Dover, 15 lives being lost and 1 saved.

June 8, 1913.—By an explosion in submarine *E–5* 3 lives were lost.

January 16, 1914.—Submarine *A–7* sank in Whitsand Bay with the entire crew of 2 officers and 9 men.

Losses in the War.

British submarine losses during the war were 61, of which seven were blown up without losses in personnel and three by the boats of the Baltic flotilla.

Twenty were lost from a cause unknown.

They went on patrol, and nothing more was heard of them. Their loss was probably due to their striking mines. Five were sunk by enemy submarines. Three were sunk while entering the Dardanelles and one by gunfire in the Marmora.

Three were wrecked on neutral coasts, one in the Baltic, and one on our own coast. Four were sunk by mines off our own coast.

Two were sunk by air bombs.

Seven were sunk by collision.

Three were sunk in error by gun or ram by our own side.

One sank in harbor, one sank on trials, one sunk by gunfire after sinking a German destroyer off the bight, and *C–3* blew herself up against the mole at Zeebrugge.

THE BRITISH FLEET "DIPS ITS ENSIGN."

Source: Archibald Hurd in the Fortnightly Review.

After hundreds of years we have dipped our flag as the one supreme sea power, having supplied a vindication of the benevolent purpose of the British Fleet, which forms a fitting end to a glorious chapter of our history. When Edward III made his proud claim to the "sovereignty of the seas," and for a hundred years afterwards, the American continent had no place on the map of the world; it was not until 1492 that Christopher Columbus discovered America. The seeds of our naval supremacy were sown in a very little world, which British seamen, in association with the seamen of other nations of the old world, were afterwards to enlarge until at last the British Empire began to take shape on the world's horizon. It remained for the colonists in the North American plantations to teach the British people how to govern that Empire. The sequence of events is curious. The French attacks upon our North American settlements led to the Seven Years' War, 1756–1763; and in the effort to pay for that struggle it was decided to tax the people in these plantations. In 1765 a stamp duty was imposed and forthwith repealed; two years later a duty was placed upon tea, and then the colonists revolted. From their Declaration of Independence sprang a new conception of the relations which should exist between a mother country and her colonies. Under the treaty of Versailles of 1782 this country recognized the United States of America, which became joint inheritors of our gradually evolved system of democratic government, as well as of

the universal Bible and a language which is the world-wide language of sea power. Many streams of emigration have since contributed to the peopling of this sovereign State on the other side of the Atlantic, but, in spite of the invasion of men and women from many lands, the golden thread of tradition, a common language, a common literature, and a common love of freedom have persisted. The American people represent a distinctive national evolution, which, under our eyes, has been reaching toward ideals which may yet prove the means of saving a war-exhausted world. A new consciousness of responsibility led to American intervention in the war in spite of the solemn injunctions bequeathed by Washington; and now, realizing the privileges and burdens of nationhood, the American people have, by means of the Washington conference, vindicated the whole record of their amazing history. We could only have dipped the flag which we have kept flying so many centuries to one nation. Under the naval treaty signed at Washington February 6, the trident of Neptune passes into the joint guardianship of the English-speaking peoples of the world.

The change which is thus brought about in the status of the British Fleet is, however, more apparent than real. The two-power standard never took account of any naval forces except those based upon European ports. When this formula was introduced, Japan was only just emerging from her chrysalis condition and the United States Navy was comparatively small. Though this country had become the pivot of a world-wide empire, its gaze was fixed upon the fleets of the European powers. The Spanish Navy having been defeated, and the Dutch Fleet permitted to sink into insignificance, the Admiralty throughout the eighteenth and nineteenth centuries was concerned with the naval ambitions of France and Russia, and later of Germany and Austria-Hungary, with the Italian Fleet in the background, associated with the Triple Alliance, but actually bound to this country by imperative considerations of policy. When Germany forced the pace in construction and manning, we assumed the naval responsibilities of the liberal nations, not only of Europe but of the whole world. At the opening of the war in 1914 there were in European waters practically only two first-class navies—those of Great Britain and Germany. With the elimination of Germany as a sea power, the British Fleet was left supreme and under the Washington treaty it will remain supreme in European waters.

But, in the meantime, under an act of Congress passed in 1916, the American Fleet was accumulating many ships of all classes, and the promise was that in 1925 the United States would possess about twice as much effective tonnage as this country. In face of this disturbing movement, the demand for economy led the British Government, with the assent of the Admiralty, to initiate a bold

policy of scrapping, and before the Washington conference met the proud armadas of the war period had disappeared, and we retained only a comparatively modest naval establishment. It was far greater than that of France or Italy or the fleets of both countries in combination, but the shadow of the rising navy of the United States was already robbing it of something of the tinsel of former centuries. Two alternatives were before us. Either the British taxpaper would have to spend millions sterling in keeping pace with the shipbuilding programs of the United States and Japan in active competition, or this country would have to be content with the status of the second sea power of the world. Whether she would retain even that position was uncertain, in view of the steady expansion of the Japanese Navy.

HANDLEY-PAGE TORPEDO PLANE.

3 March, 1922.

An officer from this office to-day witnessed initial tests of the Handley-Page slotted-wing torpedo plane designed to air ministry general requirements. It was necessary for the Handley-Page Co. to obtain air ministry authority for this officer to witness these tests.

This plane is a biplane, with the Handley-Page patent slot installed on the leading edge of both wings, but with no aileron slots. The general appearance of the plane is very similar to the DH–4, and carries only the pilot as personnel. The motor is a Napier "Lion," 450 horsepower. The slots closed and opened at the will of the pilot by appropriate mechanism conveniently placed. This plane was designed to meet the air ministry requirements for a torpedo plane to land on board a carrier, and was in direct competition with the Blackburn "Swift." The Handley-Page Co. is several months late in delivery, the Blackburn planes having already been tested, and the Blackburn Co. have received orders for six from the air ministry.

This plane is fitted with landing hooks, and with a special wire loop on the tail skid for holding the plane until the engine is turned up to full power, when the tail is released and the plane allowed to take off.

The plane was about two-thirds full loaded during these tests and showed no obvious unusual features. In about a 12 or 15 mile wind it took off in 6 seconds in a run of about 100 or 150 yards, and the pilot attempted to show a slow speed, but he throttled down much below the plane's speed for horizontal flight and was losing altitude fairly rapidly, although the plane stayed in control, but it was necessary for him to use a marked amount of up-elevator. In landing, he landed at a low speed with a very short run, but did so by using the

well-known trick of stalling down from altitude and giving a touch of throttle just before touching.

Nothing is known of air ministry opinions of this plane, or whether or not they intend placing orders.

METHODS OF BRITISH IN ARGENTINA.

3 April, 1922.

Mr. Henning and Mr. Bradway, of the Du Pont Corporation, visited the bureau to-day relative to the shipment of 16″/50 powder from Wilmington to Lake Denmark and the test of their recent firing samples of nonerosive powder at Dahlgren.

Mr. Henning returned from the Argentine on March 6, where he had been in connection with getting a contract for powder for the Argentine Army. He talked at considerable length on conditions in South America and the Argentine, and the gist of his remarks are quoted as a matter of general information.

Their contract calls for approximately 1,000,000 pounds of smokeless powder for various calibers of field artillery, contract price, $1 per pound and deliveries in from six to eight months. There is a clause in the contract by which they have to guarantee stability of the powder for 10 years. There was practically no competition in their getting the contract. The Argentine Army officials are strongly pro-German and even stronger anti-British, and would not consider the purchase of any military supplies from Great Britain. As the Germans are not at present permitted to export ammunition, they were practically forced to place a contract in the United States. As a result of their German training, they have a deep-seated suspicion of powders manufactured by the French.

Mr. Henning, as a result of his experience in the Argentine, was very outspoken in regard to the methods which the British are pursuing in every possible way to discredit the American business enterprises in South America and he quoted some of the following instances.

A representative of the Savage Arms Co. was demonstrating a Lewis machine gun in competition with a Maxim gun manufactured by Vickers. In keeping with the feeling of the Argentine officers against anything British, the Maxim gun was immediately eliminated from consideration. Four Lewis guns had been turned over to the Argentine for test and were out of the hands of a representative of the Savage Co. The guns were tampered with in such a way that it could not be readily detected, as a result of which they failed on test, and the Savage representative traced it directly to the representative of the Maxim gun, who had bribed the officers conducting the test to insure the failure of the gun.

In another instance of a competitive test of a locomotive built by the Baldwin company and a British locomotive, it was found at the beginning of the test that the feed-water ejector of the Baldwin locomotive had been clogged up. By spending a little money in investigating the origin of this action, American representatives traced it directly to agents of the British locomotive.

Relations of the Lamport-Holt Line (British) and the Munson Line (American) are practically at the breaking point. Lamport-Holt ships will answer no radio calls, except distress signals, sent out by any ship of the Munson Line. Mr. Henning returned to the United States on the *Southern Cross*, Munson Line. While in Rio a member of the crew of the *Southern Cross* was discharged for drunkenness. At the instigation of an agent of the Lamport-Holt Line, this man was persuaded to bring suit against the Munson Line for $80 damages, and the ship was liable through the Brazilian courts as security for damages and not permitted to sail. The amount of the suit was finally deposited for future trial, and the sailing of the ship was held up for three hours.

The general business conditions in the Argentine are in a very unsatisfactory state. The Government about two years ago put a big export tax on wheat with results very damaging to their wheat export trade. The Government in power is composed of radicals, who have done very little to alleviate labor troubles. As a result, the mass of laborers on the big ranches are bolshevistic in tendency, and the ranch owners are afraid to reduce their wages to normal for fear of being burned out.

The rate of exchange on American gold is very unfavorable to the Argentine and is damaging to American trade principally, due to the fact that it seems to hurt their pride that they must discount their money on American exchange, and do not have to do it on other foreign currency.

The General Motors Corporation have a very strong foothold in the automobile trade, a great majority of cars seen on the streets being Buicks, Chevrolets, and Cadillacs. They have been able so far to defeat any European competitor at every turn. The Ford is not popular; it is in disfavor and has been largely displaced by Chevrolets, though the latter car is somewhat more expensive than a Ford.

Mr. Henning spoke very highly of our naval attaché, Captain Boyd; of his fine work and his great assistance in negotiating the Du Pont contract for powder.

The gist of Mr. Henning's remarks were that the British are determined to get the South American trade at any cost. He has seen instructions to British consuls which indicate that they will stop at

nothing, unethical or otherwise, to damage American interests, and he remarked incidentally that these policies are being financed by proceeds of American war loans to Great Britain, no part of which are being repaid.

BRITISH FOG-PIERCING BEACON LIGHTS.

7 March, 1922.

Two new fog-piercing beacon lights—one on top of the hangars and one in the center of the airdrome—are now installed at the London air station, and night-flying airplanes are carrying out a series of night flights to ascertain how far these can be seen in varying thicknesses of mist and fog.

The lights consist of powerful acetylene flares, to which a chemical compound of strontium has been added, which colors the flares a bright red.

It has been found that a red light is visible through fog when all other lights are blotted out, and it is hoped that the red beacons will guide night-flying airmen to the station when all other lights are obliterated.

An officer from this office had previously witnessed an exhibition of this light. Its characteristics are as follows:

A strong acetylene flame, measuring about 14 inches in length, is directed on the upper tangent of a wheel, which is constructed of light sheet metal and fitted with corrugated periphery. The bottom of the wheel travels through a bath of strontium compound, and the wheel in revolving carries a fresh solution into the flame, thus keeping it a brilliant red. The actual value of this arrangement is still more or less a conjecture. The apparatus has been installed in connection with the proposed night-flight freight service between London and Paris, report on which has previously been submitted.

TRAINING OF BRITISH NAVAL PERSONNEL.

6 March, 1922.

Admiralty Fleet Order 3517/21 has been superseded by a new order revising instructions for the training of ordinary seamen afloat. The principle aimed at is to train progressively boys and young men, particularly ordinary seamen. For this purpose the boy is continuously and systematically taught; ordinary seamen and naval seamen depend partially on their own efforts until they go to school to specialize.

The fleet order places the responsibility for training with the flag officers commanding squadrons. The officer of the division and, under

him, the petty officers of the division, are responsible for the instruction and advancement of their men.

All ordinary seamen who fail to pass the education test or technical examinations are brought before the commanding officer in the same way as the men who pass. The commanding officer investigates the reason for failure and questions the officer of the division and all others concerned in the instruction of the men, and if the failure is due to lack of interest, or inattention or to misconduct on the part of the man he is given additional instruction in his spare time.

Commanding officers of ships which are on the 42 days' annual scale of long leave are specifically empowered to restrict to 21 days annually the long leave of ordinary seamen who make unsatisfactory progress in their instruction and, through inattention or misconduct, have failed to pass either professionally or educationally.

Scrutiny of recent advancement from ordinary seaman to able seaman developed the average time in the lower rating, which is now about 15 months for C. S. and over two years for S. S. men.

On being rated, ordinary seamen, as a general rule, cease regular continuous instruction and attend schools only at specified times.

The order further states that after being rated ordinary seamen no man is eligible to present himself for examination for able seaman for a period of six months, in order that he may gain the necessary experience as well as possess the necessary knowledge. Monthly examinations are held in gunnery, seamanship, and torpedo. Stokehole training has been abolished. Men who fail educationally are put back and reexamined three months later.

BRITISH AVIATION MISSION TO JAPAN.

1 March, 1922.

In addition to the Japanese personnel at the Kasumigaura naval aviation school there is a British aviation mission of 30 members attached to the school. This mission is headed by Captain Semphill, a very young but apparently a very capable and energetic man. During the war he occupied an important position as deputy director of technical section, bureau of aircraft production, air ministry, and also visited the United States on an aviation mission. In addition he is an excellent pilot. He has had access to all the British aviation secrets and it is doubtful if the Japanese could have chosen a better all-around man from the R. A. F.

Twenty officers and 10 warrant officers compose the mission. Each one of them is an expert in his line and this includes piloting, photography, radio, rigging, armament, bombing, instruments, motors, metal working, machine-shop practice, and parachutes. Every de-

partment of the s hool is under direct British supervision and instruction.

With the exception of Captain Semphill, all of the members of the mission live in a U-shaped building, which was especially erected for them on the field. The place was very comfortably fitted up and they have their own messes, bar, billiard room, canteen, and baths. They have a special uniform and Captain Semphill runs the mission as a naval organization and exacts the strictest of discipline. It is understood that all are well paid and that the Japanese do everything in their power to make things agreeable. From one of the warrant officers it was learned that none of the members of the mission were in active service, but had been demobilized when they received a telegram from the British Admiralty asking if they would accept positions as instructors in a foreign country. They accepted, of course, but did not learn until afterwards where they were to go or who the other members of the mission were to be.

Before the arrival of the British mission at the school very little had been accomplished, but as Captain Semphill has been given a free hand in everything pertaining to the layout of buildings, courses of instruction, etc., and as the instruction shops and buildings are practically completed, the school is now functioning very well.

The contract of the British mission was due to expire about March 15, 1922, but it is understood that the time has been extended until September 1, 1922.

BRITISH OFFICER TO BE PRESIDENT OF CHILEAN NAVAL WAR COLLEGE.

21 February, 1922.

1. A contract was forwarded last January to Captain Tonlin, Royal Navy, for his signature, by the terms of which he becomes the president of the Naval War College of Chile.

2. This week a cable was received saying that hehad signed the contract and was about to sail.

3. Captain Tonlin owes his appointment chiefly to his friendship with Rear Admiral Gomez, at the present time commander-in-chief of the navy. When negotiations were in progress for the acquisition of the *Canada*, Captain Tonlin was her commanding officer. It was Admiral Gomez who in England at the time conducted the negotiations.

Several Chilean naval officers of high rank expressed to me privately their regret that a graduate of the United States Naval War College was not selected for the position, but the influence of Admiral Gomez was too great to be overcome.

Admiral Gomez being about to relinquish command of the fleet, to take the post of superintendent of the naval academy, and as the war college is an adjunct to this, and in the same buildings, he will be directly in command of Captain Tonlin and consequently had the final voice in the matter.

Captain Tonlin, since giving up command of the *Canada*, has been attending the Royal Navy War College.

BRITISH TORPEDO PLANE.

31 March, 1922.

The Blackburn Aeroplane Co., of Olympia, Leeds, has won the competitive design called for by the air ministry for a torpedo plane carrying the Napier "Cub" 1,000-horsepower engine. The details of this which are so far available indicate a plane which will weigh, fully loaded, from 12,000 to 14,000 pounds, will carry one 3,000-pound torpedo, four 250-pound bombs, and a personnel of four men, consisting of a pilot, an observer (who will also act as navigator and torpedo man), a radio operator, and a gunner.

BRITISH LABOR IN GERMANY.

20 March, 1922.

Several engineers and shipbuilders left Dundee recently for Hamburg and other German ports, where they have been offered work by German shipbuilding firms. Letters have been received in Dundee from the men employed in Germany stating that they are quite satisfied with the conditions, and inviting several of their comrades to come to Germany, where they will be certain of getting a start. In response to these invitations, several other workers in the city are making arrangements to leave for Germany as soon as possible.

H. M. S. "HOOD."

21 March, 1922.

The United States consul general London was requested to ascertain as far as possible the condition of H. M. S. *Hood*. A report has been received written by the United States consul, Dunfermline, Scotland, a brief of which follows:

He states he has definite information that this vessel is not the success that published accounts invariably indicate. That it is published in the Dunfermline press of March 18, 1922, that the *Hood* will return from the south for an extensive overhauling in dry dock at Rosyth. As she was in the dry dock at Rosyth last year for several months and is coming back in April for another stay of probably four months, I am told that serious structural defects became pronounced soon after her trial trip in the North Sea, and

that because of engine and structural weakness she entered the Firth of Forth under half-engine power. That the engines were either of faulty design or damaged during the firing of the turret guns. Extensive structural changes and stiffening are to be made at Rosyth.

He further states that the discharge of skilled service workmen at Rosyth is to be limited and that the contemplated repairs to H. M. S. *Furious*, and probably H. M. S. *Royal Sovereign*, will require an increase, rather than a decrease, of skilled workmen. Ordinary nonservice workmen are being laid off continually.

He states that he is well acquainted with some of the officers (presumably petty officers) on board the *Hood* and that after the arrival of the vessel at Rosyth he will endeavor to obtain fuller and more definite information. This office will send him a list of questions on which specific information is desired.

BRITISH NAVAL GUNNERY.

24 March, 1922.

The following general information concerning the policy of the British Navy on the subject of naval gunnery practices has been obtained from the director of naval gunnery exercises:

The general efficiency of ships and squadrons is maintained on lines which are very similar to those which existed in the Grand Fleet during the late war and in which the United States squadron took part.

The annual ammunition allowance for practice in all classes of vessels is expended in a series of practices spread as far as possible over the whole year. These practices take the form of either throw-off firings at various classes of ship, or of target firings, and in addition H. M. S. *Agamemnon* is used as a mobile target.

The detailed arrangements for the practices are under the control of the senior officer commanding the fleet or squadron, and vary according to the requirements and facilities which exist for meeting those requirements on the different stations on which the various squadrons are operating.

In carrying out these practices there are, of course, specific problems on which information is required from time to time, and these problems usually form one of the objects of the practice.

Specific examples of these at the present time consist in the use of aircraft for observation of fire and methods of concentration of fire.

For the information of the Office of Naval Intelligence it should be noted it was impracticable to obtain from the Admiralty more detailed information concerning present target practices. Several attempts have been made by the naval attaché to induce the Admiralty to supply periodically, when issued, copies of the Admiralty fleet orders, which it is believed contains more detailed information on this as well as many other subjects. Up to date these efforts have been unsuccessful.

POLITICAL-MILITARY CONDITIONS IN CHINA.

1 March, 1922.

On December 14, 1921, Gen. Chang Tso-lin, governor of Manchuria, arrived in Peking, and a result of 17 days' visit in the metropolitan district he formed a new cabinet, which resulted on December 17, 1921, in the dismissal of the Premier, Gen. Chin Yun-peng; Minister of Communications Chang Chih-tan, and Minister of Finance Kao Ling-wei. The dismissal of these three cabinet ministers can hardly be said to have been any great loss to the Chinese nation, for the Premier, General Chin, was notoriously corrupt, and the other two dismissed ministers combined the qualities of corruptness, inefficiency, and general stupidity.

Chang Tso-lin, in forming the new cabinet, put into power Liang Shih-yi, as Premier; Yeh Kung-cho, as Minister of Communications; and Chang Hu, as Minister of Finance.

Liang Shih-yi is probably to-day one of the best-known Chinese and in some ways fitted for the post of Premier in that he has a highly developed aptitude for organization and management. On the other hand, his business methods in the past have been far from being honorable and he will never be able to live down his political mistake of having promoted Yuan Shih-kai's monarchical aspirations.

The appointment of Yeh Kung-cho as Minister of Communications was certainly an excellent move, for Yeh had previously shown his ability in managing Chinese railways.

Chang Hu can be best described as being corrupt and the willing tool of his chief, Chang Tso-lin.

The appointment of Liang Shih-yi caused an uproar throughout China, and to add to the general antipathy toward the Premier, the new cabinet authorized the pardoning of the military Anfu (pro-Japanese) criminals, who, for the last year and a half, have been enjoying the hospitality and its accompanying right of asylum of the Japanese Legation, which was extended to them by His Excellency Mr. Obata, the Japanese minister to China, in accordance with instructions received from the Japanese Government.

To make matters still worse, the new cabinet considered appointing Tsao Yu-lin as high industrial commissioner and Lu Chung-yu as head of the municipality of Peking. It should be here noted that both Tsao Yu-lin and Lu Chung-yu are the most cordially hated officials by all classes of Chinese, for it is known that they have been for years in the direct pay of the Japanese Government, and to these two gentlemen themselves can be ascribed the state of affairs which has placed China in practically a state of vassalage to Japan.

While the Chinese press throughout China was bitterly denouncing the new cabinet and the student body was daily staging anti-

Government demonstrations. Gen. Wu Pei-fu created a sensation on January 11, 1922, by serving an ultimatum to the Peking Government, in which he gave the Premier, Liang Shih-yi, one week to wind up his affairs and resign the Premiership.

For a while it seemed that General Wu was to become a national hero in ejecting the corrupt Peking Government, but, unfortunately, Wu's bitter attacks on the integrity of the Peking Government, although true in most statements, amounted to nothing more than talk, for beyond moving a few of his choice troops to his own headquarters in Loyang, he never made any attempt to encircle the metropolitan district with his own troops.

The strange feature of the situation was, however, that Chang Tsolin never openly declared at that time that he would stand by this cabinet of his own creation, and the reason for this is easily explained in that if Chang had publicly asserted his intention to uphold the Liang cabinet, Wu would necessarily have had to fight or lose face forever; such a fight would undoubtedly have resulted in a complete rout by Wu of Chang's ill-disciplined Fengtien coolie army now stationed in the metropolitan district.

Chang Tso-lin, in the meanwhile, has been making all neeessary military preparations for an offensive campaign against Wu, and not till the middle of February did he openly come out as the champion of the Liang cabinet.

General Wu Pei-fu has lost a good deal of his reputation as a man of action, in both foreign and Chinese opinion, but nevertheless his abusive epithets toward the Peking Government "put the wind up Mr. Liang Shih-yi's sails," as this gentleman took no chances and asked for leave of absence, hurriedly departed for Tientsin, there to enjoy the safety of its foreign concession.

During this whole proceeding the President, as becoming his past reputation, did nothing, for Hsu Shih-chang is a weakling, whose only ambition is to promote a continuance of the tenure of his office, with its accompanying "squeeze."

On February 14, 1922, Tuan Chi-jui secretly left the capital for Tientsin.

Tuan Chi-jui, it will be remembered, was three times Premier of China and is a man of forceful character, who commands more respect from northern China's military forces than any other military leader. It has generally become known that Tuan is working toward establishing a coalition between Chang Tso-lin and Sun Yat-sen, not that these piratical gentlemen have any regard for each other, but they individually fear Wu Pei-fu, and it is evident that the easiest method of accomplishing Wu's elimination is for them both to attack him simultaneously.

Only those who have resided some years in the Far East realize the utter futility of indulging in predictions, for one of the main characteristics of Chinese psychology is the substitution of opportunism as opposed to the average occidental whose daily acts are governed by a well-formed policy to attain a certain end: it is, however, the consensus of opinions that the spring of this year will see a conflict between Wu Pei-fu and Chang Tso-lin.

In studying the situation the nonresident of the Far East is liable to fail to grasp how little the Chinese Republic of 22 Provinces is really concerned with the Peking Government: the Peking Government exists in name only and its pathetic condition can best be visualized by a statement often made by this office: that is, that the President of China can best be regarded as a mayor of Peking, whose power depends upon the prompt payment of the Chinese National Army, which to-day is the metropolitan police and gendarmerie.

The Provinces of China govern themselves, on the whole, very successfully, and the average foreigner who minds his own business and treats the Chinese with the same civility accorded to him by the latter can count on good treatment in return and safety of person. The only reason that the world at large follows the course of the Peking Government is that this same corrupt Government owes the world at large a debt of about $2,000,000,000, which this same world is very much concerned in getting paid.

The Chinese of the Manchurian plains, the fisherman of Chekiang, or the mountaineer of Kweichow does not care the slightest what happens to the Peking Government, and the news that the head of the corrupt old President Hsu Shih-chang or in fact any other President was hanging under the Chien-men Gate of Peking would not disturb the daily life of but an infinitely small percentage of China's population.

The Peking Government, having miserably failed to govern properly since the days of Yuan Shih-kai, has deservedly lost all respect from the Chinese people.

The personnel of the Peking Government means nothing to the average Chinese, but means everything to Japan, whose existence depends on China's resources, and to the foreign investor, who is trying to obtain payments on past loans.

One interesting feature of present day conditions is the steady growth of an antiforeign feeling throughout China, and by China is meant not the foreign concessions of the treaty ports but those Provinces to the west of the maritime Provinces, which are the real heart of China proper. Every returned traveler from the interior, and especially from such Provinces as Szechuan, Shensi, and Honan narrate true stories of antiforeign demonstrations.

The Chinese of the interior holds no true hatred in his heart for the foreigner; in fact, in most cases the foreigner is of no interest to him whatever once his curiosity has been satisfied as to the foreigner's strange habits and appearance. In nearly every case where an antiforeign feeling has existed in the interior the same has generally been incited by a Chinese official in an attempt to divert the simple mind of the Chinese farmer from his real troubles of poverty, which are generally the result of this same Chinese official's lack of honesty and ability to administer the functions of his office efficiently.

It may still be interesting to remember that the famous Boxer uprising was originally not of an antiforeign nature but was converted into an antiforeign demonstration by the cleverness of Tzu Hsi, Empress Dowager of China.

That conditions in China are getting daily more chaotic is only too evident, for opium smoking and brigandage are on the increase and squeezing of the people by Chinese officials is continuing as bad as usual.

No foreign intervention or help will ever succeed in bettering conditions and China will continue to remain in this state of confusion and disorder until the Chinese people themselves unite in demanding a decent Government from their own officials.

CHINESE NATIONAL CHARACTERISTICS.

17 February, 1922.

Regarding Chinese character as a whole, many traits common to races in early stages of development are found, such as the inferiority of size and structure, the larger alimentary system with smaller nervous power; a relative hardiness, with less acute sensations resulting from injurious actions than in the case of more highly developed types, and consequent weakness of the feelings prompting to effort and leading to improvement. With less plasticity of nature there is earlier maturity. The Chinese consciousness is relatively simple, exhibiting periodic impulsiveness, improvidence, little developed altruistic sentiments—giving rise to lack of sympathy and to cruelty—and extreme conservatism. The Chinese mind is deficient in conceptions of general facts and distant results; its ideas are rigid and concrete rather than abstract, lacking definiteness and accuracy. The absence of constructive imagination is shown by the few inventions recorded during a very long national life.

One of the most serious vices of the Chinese in early times, that of drunkenness, apparently became rarer after the introduction of the tea plant in the third or fourth century A. D. And numerous instances occur of the condemnation of unchastity, the discountenanc-

ing of extravagance, philanthropy toward the poor, leniency toward prisoners, bravery, the exercise of fraternity, suffering hunger for the sake of parents, sacrificing a son to save the life of a brother's son, etc.

In the Mongol period the position of women, which some philosophers regard as a test of moral progress, is said to have been higher than before, but until within recent years the degree of civilization according to this criterion was not marked. Women were treated with respect, but were secluded, and occupied a social position far inferior to that of men.

Chinese literature has always enjoined moral conduct, and public opinion has been on the side of morality. Both literature and art were free from immoral suggestions. This fact, and the making of the literature, and consequently of the moral sentiments contained in it, the key to those positions which all coveted, must have helped to maintain a high moral tone in the nation during the long course of its development. Consequently in the period which has come under the direct observation of western students, it is found, on the whole, a moral character which, though in many respects leaving much to be desired, compared with that prevalent among other Asiatic peoples on the one hand and western nations on the other, can not rightly be described as of a low kind, especially when we consider how little precept is put into practice, even by the most advanced races. The Chinese are addicted to and tolerant toward vice, and vice is everywhere prevalent, but there is no vulgarity. Nor is there any coquetry in public, and at social gatherings women are always adequately clothed. There are no dances and consequently no behavior of a questionable character at them, which has caused dancing, as carried on in the west, to be regarded by the Chinese as indicating absence of self-control or merely as a cover for flirtation.

The customs of marrying young and of concubinage have doubtless helped to give the Chinese character a reputation for morality it might otherwise not possess. Immorality may not be conspicuous, but it exists, and, what is more important, the general attitude toward it is one of indifference or even indulgence, certainly not indignation. The moral sense is weak. Want of sympathy is undoubtedly a national characteristic.

Untruthfulness is not considered by the Chinese as a sin, but as a matter of the play of wits. Being detected in a lie does not produce in the Chinese a blush of shame, but merely silence, a stolid adhesion to the original statement, or an attempt at explanation which usually adds a second lie to the first. Perversions of the truth are resorted to in order to avoid the consequences of laziness or neglect, or for pecuniary gain, however small.

Temperance is one of the Chinese strong points. They are not always temperate, but the change was probably largely due to the in-

troduction of tea in place of spirits as the ordinary stimulant, frugality operating as a contributory cause, for tea could always be procured at less cost. Drunkenness is so rare that it certainly can not be classed as a Chinese vice. Opium smoking did a great deal of harm while it lasted, but perhaps not nearly so much as alcohol would have done. Its evils were rather of a passive kind; that is, drunkenness makes people aggressive, opium makes them lackadaisical and poetical. Since its prohibition there has been a marked increase in the demand for wines and spirits, foreign tobacco, and morphia. Possibly the too rapid suppression of one evil will be found to have given birth to several others. Besides general temperance, the moral traits of the Chinese include a very high sense of mercantile honor and great industry. These are so well known and universally recognized that they need not be enlarged upon. The sad part of the matter is that the former is said to have been declining of late years.

FRENCH GAS WARFARE PREPARATIONS.

21 March, 1922.

The following recommendations of the former head of the chemical warfare service in France may safely be considered the policy of the war department in the event that gas shells should be used in a future war.

In the actual state of the question it seems that the manufacture of the following gas shells should be undertaken in case of necessity:

Gas shells with a short duration effect for use in an offensive—Nos. 5 and 43 gas shell.

Gas shells whose effects are of a medium duration and which can be used in offensive action—tear-gas shells Nos. 7 and 9.

Gas shells with a very persistent effect to be reserved for the defensive—gas shells No. 20 and tear-gas shells No. 21.

All of the above-mentioned shells would require a certain delay in order to establish their manufacture, but in waiting for this it will be possible to substitute shell No. 16, which is especially easy to manufacture and charge and whose average poisonous and persistent qualities make it useful both for the offensive and defensive.

A certain number of officers who have undergone special instruction on matters pertaining to poison gases and the modes of combating same are detailed by the Minister of War as inspectors of antigas equipment.

These officers are charged with the annual inspection of antigas equipment in the various army corps, also with such additional inspections thereof as may be deemed necessary.

They are further required to supervise the work of regimental (or other organization) gas officers in the maintenance and repair of antigas equipment.

During the period of annual inspections of antigas equipment they are required to conduct lectures on the repair of the same.

FRENCH POLITICAL CONDITIONS.

24 March, 1922.

1. In a world still out of breath from the World War, and with the economic balance wholly out of joint, it is not surprising to find France, the scene of that war, floundering about almost without a policy. Her own public men daily cry out against this lack of direction to her efforts.

2. Volumes of foreign propaganda are disseminated to prove France to be possessed of a very definite policy—namely, one of militarism. This charge was about to fall to the ground in the public mind, when, as in America, it became evident that France could do no less for her own preservation than to keep up her army; but latterly more is being made by propagandists of French support of Poland and the Little Entente. This line of criticism of France is less readily combated because less readily understood by the public; yet here again is French effort directed to her own preservation—the collapse of Russia as an ally to the east of Germany exposes France to the undivided attention of the German army at such time as the latter can regain its feet unless Poland and the other newly formed countries to the east be ever prepared to serve as a very definite diversion.

3. Here, then, is a French policy—self-preservation.

4. No one living in France can fail to appreciate the financial and economic burden of her army. Statesmen, senators, deputies, vie with one another in their efforts to reduce the army, to reduce the period of obligatory service, so that young men may the sooner be off the Government pay rolls and returned to productive work in the country.

5. Recent foreign (European) publications condemn France for seeking economic opportunities in the Near East and in Russia. Beyond all question, French capital is making efforts in this direction; but Frenchmen can see nothing culpable in their doing what all Europe (and America) is doing. France's handicap in this regard is the lack of good press agents and of organized propaganda for opposing her rivals.

6. Here, again, though perhaps less distinctly defined, is a policy—restoration of trade opportunities.

7. Even deeper, as regards the Near East, is France's concern for a share, or sphere of influence, in oil lands, properties, or concessions. Oil is to be had in appreciable quantities around the Black Sea. America (Standard Oil Co.) and England have real interests here. French interests are comparatively negligible; yet in France there is no oil. French ships, including those in the modest building program just voted, call for oil fuel.

8. Here is a policy akin to both self-preservation and trade opportunities.

9. It is needless to touch upon the attitude toward Germany excepting by way of making it of record in the monograph.

10. France is convinced, not only by the experience of centuries, but as well by the almost daily discovery of additional evidence, that Germany is not observing the terms of the treaty of Versailles, that arms and munitions are constantly being discovered, and that her forces are organized under guise of police and territorials, that Germany is but biding her time.

11. The retention of a comparatively large army in France and the moral support of Poland are the natural reaction to this conviction. Meantime rumors come from abroad that a Bolshevik army of some 2,000,000 men is prepared to wipe out Poland's Army in spring. The question is, have they the money or sufficient equipment? I doubt if France greatly fears this.

12. The value of the French franc, now but 50 per cent of normal, is an index of her financial and her economic situation. And this, in turn, is felt by the French people to be due in large measure to the haunting fear that Germany will never pay the sums charged against her by the treaty of Versailles and subsequent agreements.

13. Public opinion in France is such that a Prime Minister must proclaim it to be his guiding principle that "Germany must pay." But even so. France hesitates to use it for coercing Germany, partly because of the attendant expense and partly through reluctance to isolate herself by independent action.

14. And all this time the army is costing them an all too large percentage of her income. Every possible effort is being made to reduce this expense—to cut the army to its lowest possible limits of safety. While we in America may feel that our armed forces are being reduced beyond this limit of safety, we do not appreciate that in France there are politicians—communists, defeatists, socialists—constantly clamoring in Parliament to cut the term of military service to one year for each class of young men. We do not appreciate that even of the 629,999 men now with the colors (including colonials, and including all garrisons at home and abroad) some

250,000 are now home on leave because the Government is seeking this means of saving money on its army. Americans may feel that by pressing the Allies for payments of their debts, we are constraining them to reduce military expenses. Germany owes no such debts and the Bolsheviks recognize no debts; thus it is that only France and Poland can be affected by action of this kind by the United States. France's longing to reduce her army is pointed out above. For Poland to disarm would be suicidal, wedged in as she is between Germany and Bolshevik Russia.

15. The situation as regards the French Navy is even more deplorable. The world knows that her navy was falling behind even before the war; perhaps the world knows that during the war no naval building whatever was possible in France; perhaps the world knows that France is now scrapping some five half-built battleships because they can never be up to date; but it is doubtful if the world appreciates that France is now voting to build 3 light cruisers (8,000 tons), 6 destroyer leaders (2,400 tons), 12 destroyers, and 12 submarines, after a two-year fight in her Parliament.

16. This is known in France as a "soldering" program—one to tide over from the obsolete ships of yesterday to the newer types that she dreams of for to-morrow. Nor does the world appreciate that in building these ships France is competing with the ships left to Germany by the treaty of Versailles. And this soldering program, be it observed, is not one of one-year, but is to be covered by appropriations during a three-year period.

17. French policy, or policies, may thus be said to be due to preoccupation as to her very preservation. The foreign, the international, situation is so ever present in France at this time that it were impossible for her to pursue any well-considered policy along other lines. There is the restoration of the devastated regions, true, and this absorbs large sums, but it is no more than a result of the war, unless those regions be said to serve as constant reminder of the horrors of war.

18. Foreign philanthropy—American and British, for example—may be spending much time, money, and effort looking to restoration of this stricken region; but not only is the Government of France devoting much useful attention in this direction, but cities and Departments in France remote from the western front are "adopting" certain liberated areas with the view of their restoration.

19. Matters of internal policy can only wait for more stable international conditions. These international matters have to do with finance, labor, education, Government ownership of public utilities. shipping, public health, Government reforms, etc.

FRENCH WAR COLLEGE.

31 March, 1922.

1. The naval college (ecole superieure de la marine) is abolished and is to be superseded by—

(*a*) A naval war college (ecole de guerre navale).

(*b*) A center of advanced naval studies (centre des hautes etudes navales).

2. The naval college has been in existence as such for 24 years. It was closed from 1914–1919, owing to the war, but was reopened in 1920, and since then has been functioning along the same lines that existed prior to 1914. The purpose of this school was to fit officers only to command, no provision being made for preparing staff officers. It is with a view to correcting this that the two new schools named above have been organized:

(*a*) The naval war college, to train junior officers in the duties, etc., of staff officers.

(*b*) The center of advanced naval studies, to train senior officers in the exercise of high command.

NAVAL WAR COLLEGE.

3. The purposes of the naval war college (ecole de guerre navale) are:

(*a*) Primarily to train junior officers for duty as staff officers.

(*b*) To prepare them for command and to develop their general military education.

(*c*) To assure a unity of view as to the methods for accomplishing the military conceptions of the commander.

4. Student officers are selected from among lieutenants, senior grade, on written application by them, forwarded approved by their respective commanding officers. Candidates must then submit a thesis from which some judgment can be had of their degree of intellectuaal culture and technical education. These theses are evaluated by a board consisting of a flag officer and two senior line officers. Authors of accepted theses are then brought in person before the board for the purpose of dilating upon the ideas advanced in their theses. They are finally classed by the board according to the relative aptitude they demonstrate.

5. The number of candidates to be admitted is determined yearly by the Minister of the Navy.

6. The course lasts one year, commencing always on November 15.

7. At the end of the year student officers undergo oral and written examinations which, if satisfactorily passed, entitle them to be breveted staff officers.

8. The naval war college and the center of advanced naval studies are commanded by the same flag officers, who are directly under the

orders of the chief of naval general staff. The assistant commandant of these two schools is the officer who is professor of naval strategy and tactics.

9. Lieutenants, senior grade, candidates for the naval war college, must fulfill the following requirements:

(*a*) At least two years' but not more than six years' service in their grade.

(*b*) At least two years' sea duty in their grade.

Instruction is divided into—

(*a*) The main instruction, which concerns the art of war and conduct of naval operations.

(*b*) Supplementary instruction of general and technical nature required of officers called upon to exercise command or to perform the functions of general staff officers.

10. The main instruction comprises the following courses and practical exercises (special emphasis is laid on practical instruction, on which much time is devoted):

(*a*) Naval tactics and strategy.
(*b*) Applied tactics of surface forces.
(*c*) Applied tactics of submarine forces.
(*d*) Applied tactics of aerial forces.
(*e*) General staff courses and practical exercises.

11. The supplementary instruction comprises lectures on—

(*a*) Naval history.
(*b*) Foreign navies.
(*c*) International law.
(*d*) Administration aboard ship.
(*e*) Naval artillery.
(*f*) Torpedoes.
(*g*) Naval machinery.
(*h*) Naval construction.
(*i*) Naval aeronautics.
(*j*) Mines, mine dragging, and mine barrages.
(*k*) Submarine detection.
(*l*) Telephonic, telegraphic, and other communication systems.
(*m*) Information service.
(*n*) Cryptography.
(*o*) Education, training, and discipline of the ship's personnel.
(*p*) The army.
(*q*) The merchant marine.
(*r*) Political geography.
(*s*) The French colonies.
(*t*) Current events.
(*u*) Miscellaneous.
(*v*) Attendance at certain lectures and exercises at the war college.

CENTER OF ADVANCED NAVAL STUDIES.

12. The purpose of the center of advanced naval studies (centre des hautes etudes navales) are:

(*a*) To train a certain number of senior officers in the duties and functions of chief of staff of naval forces.

(*b*) To train these officers also in the exercise of high commands.

13. Student officers are selected from among captains and commanders on written application by them forwarded approved by their respective fleet or squadron commanders. Selections are made by the Minister of the Navy on recommendation of a classification or efficiency board. The course lasts seven months, commencing on January 1 of each year.

14. Candidates for admission must fulfill the following conditions:

Captains.—Not more than five years' service as such for admission January 1, 1922. Thereafter not over four years' service in the grade.

Commanders.—Not less than two nor more than seven years' service as such, and at least 18 months' sea duty in the grade.

15. No foreign officer may be admitted to the center of advanced naval studies.

16. The program of instruction includes:

(*a*) Courses on the organization, operation, and command of naval forces.

(*b*) Courses on naval tactics and strategy.

(*c*) Lectures on naval policy.

(*d*) Lectures on political geography.

(*e*) Lectures on naval history.

(*f*) Lectures on general administration of the navy, its budget, ministry, arsenals, and fleets.

(*g*) Lectures on land warfare, etc.

(*h*) Lectures in common with the student officers of the center of advanced military studies.

(*i*) Practical exercises in strategy, tactics, and general staff functions.

(*j*) Such courses and lectures at the naval war college as the students may choose to take.

FRENCH ARMY PERSONNEL.

30 March, 1922.

1. The morale in the French Army, like in our own, has suffered from the process of demobilization and from the changes which the war has wrought in society throughout the world. At the present moment it would seem a mistake to say that the morale of the army,

and in particular that of the officers, is very good. This lowering of the spirit and general discontentment can not be traced to one definite cause but seems to be based on the natural reaction following the war and to a variety of minor causes.

2. Among the latter the one of first importance with respect to the officers is the question of pay. During the war the pay of all officers was raised to an extent of about 75 per cent in pay and allowances. This increase over the prewar salaries does not cover one-third of the increased cost in living, and the present pay of a captain, about 1,000 francs per month, including all allowances, is not sufficient to support a family either in Paris or the Provinces.

3. Before the war many officers in the army, especially in the cavalry and field artillery, came of families who had small private fortunes of their own. Now, although during the war many great fortunes were made, the class of people from whom these officers were recruited gained little or nothing and though their wealth, in figures, remains the same as in 1914, yet its purchasing power has been reduced to one-third of what it was in prewar days. We thus see two classes of officers badly hit—first, the man who before the war managed to scrape along on a slim salary; and second, the man who formerly was able to live in comparative luxury due to his outside resources, but who is now reduced to a respectable poverty.

4. The matter of promotion is another source of discontentment. Many officers who were retired arbitrarily during the war are naturally disgruntled and voice their complaints against the army in print. A great many of the higher officers have kept their temporary grades, giving such a surplus of colonels and generals that there will be no promotions for almost two years, unless a change is made in the retirement law.

5. The morale of the enlisted men is vastly higher than the officers'. The French believe that a contented soldier well instructed makes a well-disciplined soldier. Thirty years ago the small army could be kept recruited with men to whom life in a frontier garrison made an appeal; to-day the soldier appears to wish to lead, as nearly as possible, the life of his civilian comrade. Large camps and isolated garrisons do not permit of this; the pay given has very little result on either enlistment or desertion. The French system of stationing troops in cities or large towns, from a morale point of view, is good. From a military or instructionable point of view it has its disadvantages, but a large contented force is better than a small discontented force, although the latter may be better instructed. This fact alone is largely responsible for their contentment and submission to military rule. The French have no morale branch; all ranks apply it all the time. Unquestionably the French officer is an artist in raising the morale of the men under him. The fact that officers have

at some time been enlisted men places the officer in a favorable position for gaining the confidence and regard of the men under him. The French officer is taught (at St. Cyr, Samur, the Polytechnic, and Fountainbleau) how to instruct men without antagonizing them.

6. A deep feeling of patriotism, love of country, and a desire to serve under its flag are the chief sentimental elements in the military character of the French soldier.

7. Native troops are very loyal to France. Formerly there were a number of malcontents who went to Korea during the war. After they returned to Indo-China quite anti-Japanese and very well satisfied with the French rule.

8. The enforcement of discipline and the treatment of the men is much harsher than in the metropolitan regiments.

DESTRUCTION TRIP TO PARIS OF GERMAN AIRSHIP "Z–X."

1 April, 1922.

[The report submitted below is the seventh of a series of reports describing war trips of German airships. These reports were copied from the German official war records. The report below describes the trip of *Z–X* on March 20–21, 1915, to attack the fortifications of Paris.]

A low-pressure zone lying over the North Sea and Atlantic Ocean, and which had already made itself noticeable over the Channel by the low-hanging clouds, forbade a trip to England on March 18, while the high pressure over France allowed one to anticipate favorable weather for a trip to Paris. In reality, aside from a short snowstorm shortly after departure, clear weather prevailed during the entire trip.

At 9.25 p. m. the *Z–X* left the towing line at Brussels-Evere. On board were 12 persons, 2,440 kilograms of fuel and oil, 2,720 kilograms of water ballast, and 1,000 kilograms of bombs (1 at 100 kilograms, 10 at 58 kilograms, 15 at 10 kilograms—these all explosive bombs—and 15 incendiary bombs at 11.5 kilograms.)

After a smooth trip over Maubeuge-St. Quentin at 1.30 a. m. we flew over the line of combat between Noyon and Compiegne at 2,300 meters altitude, apparently unnoticed from below. At 2.10 a. m. on the heights of Verberie, on both the northwest and northeast corner of the fortress belt, a searchlight was visible. According to a prearranged plan, we flew over Creil-Pontoise toward the west, from west to east, over St. Germain, the north boundary of the city of Paris, in order to first bombard the extensive tracks and magazine positions on the northern sector between the Gare St. Lazare and the Gare du Nord.

At first the city was completely illuminated, but when the ship arrived there, certain sectors were made dark, without, however, influencing the orienting. About 40 searchlights lighted the ship, working together very cleverly in spite of a flying altitude of 2,400 meters, and so effective was it that during the entire trip over Paris (about 40 minutes' duration) the ship was as in broad daylight.

In direct teamwork with the searchlight, numerous batteries on the entire north fortress line became active. Great quantities of explosive fragments above and in the same altitude as the ship allowed one to know of the presence of defense cannon in great numbers and skillfully distributed. From the Bois de Boulogne a battery fired incendiary projectiles, which had been mentioned in the French newspaper as a new special ammunition. These projectiles, whose trajectory one could follow from afar because of their nature, disappeared about 1,000 meters under the ship or to the side at an approximate altitude of 3,500 to 4,000 meters above the ship without special explosion indications. At 3.15 a. m. we left the fortress belt northeast of St. Denis with course toward the north after the entire amount of ammunition had been dropped between Courbois and the Gare du Nord.

Three cells in the center of the ship had been slightly damaged by explosive pieces, so that two of them were over two-thirds empty.

At 4.30 a. m. we reached the fighting line north of Compiegne. One of the battery cannon installed in the woods opened fire on the airship, which from the beginning was flying well at 2,400 meters altitude. Besides this, the ship was heavily bombarded by machine guns and infantry, as was indicated by the numerous damaged places. An artillery direct hit went through the gangway immediately before it detonated. Three further cells were so badly damaged that they emptied with great rapidity. Because of this the ship suffered so much in carrying power that, in spite of giving out of the last remaining ballast, the reserve benzine carried in the tanks, all reserve parts, and the machine-gun ammunition, it could not be controlled. It turned almost vertical, so that the steering controls did not work effectively any longer and the ship made slow curves from St. Quentin southward.

At Grubies, 4 kilometers south of St. Quentin, the ship landed at 6.10 p. m. The stern end ripped through a high power line and took a pole along with it; the rear car struck and the point bent and went through a tree. The ship with its rear car rested on the ground, while the bow was suspended about 20 meters over the banks of a brook. With the assistance of the men of the field watch of a Frankfurt battalion and the reserve ammunition column No. 22 of the Second Army who hurried to us, the ship was fastened down.

Aside from the shot damage to the cells, and because of this the damage to the material, the ship had otherwise only received slight damage. The cruciform at the stern end, together with the lower vertical rudder, had been ripped off by the high-power lines, a lucky accident because a contact one-half meter farther forward would have caused an explosion of the ship through the very strong electrical sparks.

The propeller shafts were bent and the suspension of the gear case was ripped off for the most part. The propeller itself, the motors, the cars, and the frame in themselves were not damaged. Nevertheless the taking down of the ship had to proceed because the procuring of replacements for the damaged parts and the procuring of gas would have taken too long a time.

Also from the fact that the ship had already collapsed between the middle cabin and the front car in an hour's time as a result of the loss of gas, repairs in the open field would hardly have been possible owing to the weather conditions.

The taking down took place March 21 and 22 and the loading was ended early on March 23. The quick accomplishment of the clearing-away work was made possible through the experienced and industrious help of the men of the artillery workshop and the men and horses of the reserve ammunition column No. 22 of the Second Army and with whom the crew found quarters, etc., in Grubies.

Of the dismantled parts, the first are the very good motors, further the cars, the cells, as far as they were not damaged by shots, could be saved whole; the valves and all equipment and armament parts could be used without further repairs. The frame had to be broken up because of transporting and will be melted and used again.

GERMAN SUBMARINE OFFICERS' ORGANIZATION.

23 February, 1922.

[This report is a translation of a French report in regard to an alleged course of action to be taken by former submarine officers (German) regarding the giving of information in connection with submarine navigation.]

Lieutenant Waszner, of the German Admiralty, has addressed a communication to the officers of the "Ubootsmesse," "Flandern" regarding the next meeting of that organization which is to take place at Berlin on the 1st or 2d of October.

Lieutenant Waszner is the promoter of the movement of the naval officers in favor of the submarine commanders Boldt and Dihmar.

The following passage is taken from Waszner's communication:

For some time representatives of foreign powers have addressed themselves to former submarine officers inviting them to inform certain foreign

Governments regarding their knowledge in connection with submarine navigation. There has even been the question of employing said officers in the service of the interested States.

In the interest of the fatherland, each one of you is requested, in case such an overture is made you, to communicate with Captain Rose (retired), of the firm of Goldschmidt Co., Essen a / Ruhr, before giving your answer, using this present communication as reference. The motives underlying this course of action can not be set down in writing.

GERMAN NAVAL BUDGET.

6 March, 1922.

[The following report gives the figures of the German naval budget for the year 1922.]

The budget for the Federal Navy for the year 1922 foresees expenditures of 972,754,026 marks, of which 855,312,026 marks are ordinary expenditures and 117,442,000 marks extraordinary expenditures. Against these expenditures stands an income of 86,406,500 marks, which has chiefly been reached out of the sale of equipment, etc. About 25,000,000 marks have been secured out of the operation of transport ships. In comparison with the 1921 budget, the sums now demanded for the navy are greater by 285,944,168 marks, which finds its explanation in the great depreciation of the money, as the size of the navy is bound in closely by the peace treaty. Only the increased putting into service of permitted ships can further increase the requirements of the navy. This, however, for the year 1922, is only possible to a minor extent. One battleship and two small cruisers more than in 1921 are to be placed in service. The approved naval strength of 15,000 men has not yet been fully reached. (There are about 58 officers too few and a deficit of 990 warrant officers and men). Particular interest is being paid in the budget plan of the proposed expenditures for the construction of a small cruiser. For the hull of the ship 161,000,000 marks are proposed, of which 91,000,000 marks are still to be demanded. With artillery and torpedo armament, the cruisers of 6,000 tons displacement will cost, completed, 192,202,000 marks. The total budget for the army and navy for the year 1922 is estimated at 4,675,592,245 marks. The navy budget is only 20 per cent of the total defense budget.

NEW FORMS OF SEA POWER.

Source: Vice Admiral Hollweg, Retired.

26 March, 1922.

As in everything else, the World War has also wrought a fundametal change in the form in which sea power is exercised, geopolitically, strategically, and tactically. In Washington this has been

duly expressed. The meaning and the aim of sea power remain the same; that is, protection of the interests considered as being necessary to existence and comprehended in the term "maritime interests," including the creation of "safeguards" for territorial possessions and for the ocean routes between them, if possible by prestige and silent pressure but, if necessary, by means of brute force. According to the individual interests involved by reason of imaginary or real dangers, that is to say, according to the will of those in power, the expression "safeguards" may be taken in a wider or more restricted sense. The truth of the aphorism from "Wallenstein" may still be applied to-day:

> "If you are in possession you are in the right
> And the multitude will defend you."

The saying "Right before might" remains only a phrase in spite of the League of Nations and the disarmament conference. A humanizing or improvement of maritime law—which is also supposed to protect the weak—by which alone "right" could be made to take precedence over "might" in the disruption of nations at war, and the inadmissably strong influence of sea power could be restricted, is not considered at all at this time, least of all by England. Before the World War the center of maritime power had been, for hundreds of years, in Europe. From there England with her navy ruled the world. In the Atlantic and in the Mediterranean, never more than 100 nautical miles from shore, the battles, the outcome of which decided the mastery of the seas, were fought. The occasional actions which took place in the West and East Indies in the eighteenth century had no effect on the situation, as they were not decisive from a military point of view. In the World War the United States, making up for lost time, first became a true naval power. From a political point of view, her influence from the middle of the nineteenth century, especially in differences with England, was based more on her impregnability by water and land and on "unlimited possibilities" than on the offensive power of her Navy. In the World War America was at last permitted to gratify her desire for naval power. The sea power of Japan, strengthened by Tsushima, had possessed only a local importance which, however, was temporarily extended by the English-Japanese alliance, since set aside. War and events of war awakened in the Japanese naval aspirations which were nipped in the bud at the Washington conference.

The principal maritime power of the world—England—owing to the growth of the German Navy, had seen herself compelled since 1905 to concentrate her forces in home waters, a state of affairs which, in the course of time, proved to be somewhat of a strain and harmful to British interests. The amicable compromise which Germany, with

a proportion of large battleships of 16:10, had proposed in 1913 was rejected by England. If it had been accepted the world would have been spared the Great War, America would not have become a naval power, and England would have been given greater "safeguards" than she obtained in the naval treaty drawn up at Washington under American pressure. The right of Japan to territorial expansion, to industrial and commercial development, has been universally acknowledged. The rights of Germany, which was developing the greatest industrial and export state of the world, to maritime protection, was contested by England in the Great War. She desired to free herself from constant political pressure in the North Sea and at the same time from economic inferiority. In the end England by no means bettered her position either politically or commercially, and, in addition, pressure on the mother country was not removed. This pressure will be now exerted by France with her submarines—France favored by her geographical position and now entirely free along her land frontiers.

England's land possessions were increased by the war; the Indian Ocean is almost entirely surrounded by English soil. The routes leading to this region, especially the Mediterranean, are, however, no longer as entirely under English control as formerly. England as a sea power, contrary to what is the case with America and Japan, can not keep from being involved in European interests. It is now, as it was formerly, dependent on conditions in Europe. While it is true that in the North Sea and the Baltic, England now reigns supreme, a fact which is of importance to Russia, she has become less free in her political decisions as the world's greatest naval power, and by the entrance of entirely new naval factors in the World War has become more dependent than she was in the past.

Between the two most important oceans, the Atlantic and the Pacific, lies the United States, with its extensive, protected sea front and commanding the oil lands of Mexico by the two fortified outlets of the Panama Canal. Here to-day is the central point of the sea power of the world. Only the future can prove whether the balance of the navies of the world, attempted in Washington, is to be lasting, for the closer accord between the Anglo-Saxons does not mean a cessation of shipping and commercial competition which is the cause of all naval warfare. Japan, freed from her alliance with England, wisely seeks a path along which she may travel without immediate fear of collision with America. The rôle played by the aspiring States of Latin South America may be an important one in the future. In a naval war they would be a coveted ally if they should have the requisite naval force in readiness. The naval treaty appears to limit the small powers in the number of warships which they may have.

Strategically, the present situation is as follows: The space in

which naval warfare may be waged has been extended, while the ships, the upholders of naval power, in spite of all technical improvement in the way of oil engines and oil fuel, can not keep pace with this expansion. They are more dependent on distance and supplies than the "omnia mea mecum portantes" ships of the sailing-vessel period. Owing to the complicated technical system of the modern naval war machine, the traversing of long distances requires the presence of a large number of colliers and the most modernized bases. England lacks these in the Far East and the naval treaty of Washington greatly restricts the establishment of new bases in the Pacific Ocean, in which waters the United States and Japan have prior rights.

Owing to the length of the routes, the utilization of sea power is rendered generally more difficult, although England's route to the Pacific is exceptionally wide. A continued reenforcement of her ships in this region would mean less protection at home, and the menace of France would become an increasing source of worry. The greater the deployment of naval forces in enemy areas, the greater is the vulnerability of the lines of communication. The offensive mode of procedure in modern naval warfare in which the enemy must be hunted for on a widely extended line is greatly inferior to the watchful defense of definite areas on home bases. The limitation of navies and bases agreed to at Washington would appear to be an open expression of the desire to make use of these strategic difficulties for the purpose of lessening the danger of war. The blockade and warfare on commerce are also restricted by the limitation of the number of naval units. The establishment of barred zones such as was possible for England to carry out in the North Sea and Mediterranean during the World War and which also barred neutral countries will be impossible, not only owing to the great distances in the Atlantic and Pacific Oceans, but because the submarine will be excluded as a commerce destroyer.

It will be necessary to evolve entirely new and practical forms of naval warfare. The large battleship, in spite of all warnings of American and English experts, is still the sole support of the sea power. But a decisive battle between squadrons in line will no longer be the tactical aim of belligerents. The Skagerrak battle will not be repeated. Difficulties of command, improvement of ordnance, attack with poison bombs by flying squadrons screened by smoke, the use of faster and improved types of submarines in daytime fighting, giant torpedoes guided by radio from airplanes, would inflict terriffic damage on an extended line of battleships in close formation. That the problem will be solved by the engagement in battle of groups or of single ships seems probable. With respect to

land warfare, it has also been predicted by the English General Hamilton that this will be carried on by groups. The experiences of the World War will be valuable only to a limited degree in modern naval warfare. Technique progresses relentlessly. The efficacy of many new weapons is still uncertain in spite of the tests to which they have been subjected. It may be that during the 10-year naval holiday the large battleship will quietly and ingloriously pass out of existence.

How, in future conflicts, one sea power will attempt to dictate to another is for the time being a problem which can not be solved; but it is certain that the technical improvements of the weapons of naval warfare will also contribute to the prevention of war. The risk of conflict would be too great, the result too doubtful. In future differences the political economists and financiers will play a greater rôle than the admirals.

For the Germans—disinherited and technically checkmated—these considerations have only a relative value. They teach us, however, that the factor, sea power, still exists, but that the manner in which it will be used is doubtful. A firmly established domestic economy, a diplomacy capable of turning this to account, a people united in will, these are powerful factors which in the future will possess a very high degree of importance. That the Germans are lacking in these increases their political weakness to the point of impotence. The sword will rest less loosely in the scabbard. Confidence will determine the fate of the people; at least until the horror of the World War has been forgotten and the interests of the nations once more clash unrestrainedly with each other. Then sea power will again play a prominent part and will profit him who has it at his command. The truth of this is proved by the fact that in Washington only a limitation of armaments, no actual naval disarmament, was agreed to.

ITALIAN RADIO TRANSMISSION OF PHOTOGRAPHS.

4 March, 1922.

On the 2d of March a test was carried out between Rome and Massua, Africa, of radio transmission of photographs. Professor Korn, of Berlin, the inventor of this system, was present and in charge of the experiment. The experiment was an unqualified success. His Majesty the King of Italy was present at this experiment of sending photographs by wireless over considerable distances. The distance from Rome to Massaua, in Africa, is about 2,500 miles.

Professor Korn has informed the naval attaché that the Italian Government, through its ministry of marine, has bought the rights to use his system in the Italian Navy.

THE INTEREST OF THE UNITED STATES IN THE VATICAN.

8 March, 1922.

[The following notes on Vatican politics have been made for the naval attaché by an impartial non-Catholic observer in whose sources of information and judgment the naval attaché has confidence. These notes are submitted as a report in the belief that they are of general political interest and of particular interest to those officers of the Navy whose several missions may involve them in relations with the authorities of Catholic countries.]

The death of Pope Benedict XV and the election of Cardinal Ratti as Pius XI, apart from religious and sentimental interest in the succession, are events of prime importance in the political world. The power and influence of the Holy See throughout the world are so great that it becomes a matter of practical interest, not only for Italians, but for all nations, to inquire into the character of the new Pope, and the probable policy of the Church under his direction. The question is more readily examined under two heads, first as a problem in Italian politics, and secondly, as a study in the relations of the Holy See with the world at large and more particularly, for our purposes, with the United States.

1. THE HOLY SEE AND ITALY.

It is important briefly to recall the history of the political relations between the Holy See and the Kingdom of Italy. On September 20, 1870, the present Italian Government occupied Rome by military force, and thereafter annexed the city, the States of the Church, and the so-called patrimony of St. Peter to the new Kingdom of Italy. The Pope, Pius IX, was left unmolested, a voluntary prisoner in the Vatican palace. In May, 1871, the Italian Parliament enacted the the law of guarantees (law of 13 May, 1871, No. 214), by which the relations between the new Government and the Holy See were defined. Amongst other things the Pope was accorded sovereign rank, with full territorial sovereignty over the Vatican palaces, and gardens, the basilica of St. Peter, the basilica and palace of the Lateran, and the papal summer palace at Castel Gandolfo, and in addition was granted a perpetual annuity of approximately $650,000 a year. Neither Pius IX nor his successors, to the present day, have ever accepted the provisions of the law or recognized the Italian Government as the lawful and legitimate authority in the territory formerly subject to the temporal power of the Holy See. Hence the so-called "Roman question," for 52 years a fruitful source of political hatred, of party faction, of domestic and foreign intrigue, a thorn in the side of the Government and of the Holy See, and the terror of every chancellery in Europe.

For many years after 1870 the situation remained acute, and the bitterness between the adherents of the Italian Government on the one hand and the large and powerful clerical party throughout Italy on the other hand, supported as the latter was by foreign influence in many quarters, proved a constant menace to the security and solidarity of the Kingdom. In recent years, however, there has been a marked change in the attitude of each party toward the other, although the Holy See has remained inflexible in its insistence upon its legitimate right to the temporal power. The late Pope, Benedict XV, reaffirmed the papal claim in this respect almost immediately after his accession in 1914 in his encyclical "Ad Beatissimi Apostolorum Principis." But notwithstanding the lurking pitfall of the Roman question and notwithstanding the difficulties and animosities engendered by the policy of the Vatican during the war, expediency has lately dictated a policy of conciliation between the Government and the Holy See. The political genius of Benedict XV was quick to grasp the opportunity that would almost certainly have been scorned by Pius X, whose policy was so strongly influenced, if not actually framed, by his reactionary and mediaeval-minded secretary of state, Cardinal Merry del Val.

On the part of the Government the strongest motives now urge an understanding with the organized church, which is recognized everywhere as the most potent single influence in the combating of Bolshevism and is consequently capable of rendering invaluable service in a country that has been a particular target for the doctrinaires of Moscow. The church, on the other hand, has much to gain from the support of the Government, not only in the possible settlement of outstanding questions of property but also in the freedom accorded to the exercise of spiritual authority over the Catholic population; and, furthermore, the possible settlement of the vexing Roman question looms up as time passes and the wounds of the last century are healed. The formation of the Partito Populare as an avowed clerical group, with a large representation in Parliament, and a number of seats in the ministry, has been the first great tangible result of the intelligent policy of gradual conciliation that marked the relations between the Government and the Holy See during the pontificate of Benedict XV.

It has been stated on good authority that Nitti, while Prime Minister, had actually entered into negotiations with the Holy See for the settlement of all outstanding questions and the establishment of a definite and complete concordat, but that these negotiations broke down over the question of free access to the sea within the papal territorial sovereignty. It has also been said, probably with truth, that the Socialist Party, under the leadership of Modigliani, became alarmed at the prospect of the increased prestige

that the Partito Popolare would enjoy under such concordat, and forced Nitti, who was dependent on their votes, to abandon the whole idea. But the very fact that negotiations were possible marks a great advance in the progress of the conciliation. Such a step would have been unthinkable even a very few years ago.

At all events it is undeniable that a great change has taken place in the relations between the Government and the Holy See, and if the much desired settlement of their differences has not yet been accomplished, at least the ground has been prepared and the seeds of good will have been sown.

An interesting incident indicates the degree to which the conciliation has gone. When the late Popes body was lying in state in St. Peter's and vast throngs came to the basilica to pass before the bier, the police arrangements both outside, in the piazza, and inside the church itself; that is, in the extraterritorial precincts of the Holy See, were carried out by regular troops of the Italian Government. It has not yet transpired what brought about this extraordinary departure. The aid of the Government must have been requested by the Sacred College, which is in absolute control of the Holy See during the interregnum; and yet such a request would have been in direct violation of the express provisions of the canon law. ("Codice di Diretto Canonico," Vatican edition, 1919, pp. 795 and 803.) On the other hand, the Government could hardly have acted on its own initiative in direct violation of the law of guaranties. Clearly there is an intimate understanding between the two parties that is suggestive of the well-known American remark, "What is the Constitution between friends?" Numerous other incidents, more or less authenticated, point to the same conclusion, and it is said on good authority that Cardinal Merry del Val raised a lively protest to the Cardinal Chamberlain Gasparri against the unduly cordial relations that the latter established with the Italian authorities during the interregnum. These incidents have likewise had their repercussions amongst the extreme Nationalists, anticlericals, and Masons in the Government, press, and the country at large, who hate the Vatican and all its works and particularly dread the growth in influence and power of the Partito Popolare. To the latter sentiment may be ascribed in large degree the recent cabinet crisis and the serious difficulty experienced in forming a new Government. The Partito Popolare, with 109 seats in the chamber, forms so large and important a group that it can not safely be ignored by any combination of factions amongst either the Right or the Left. A great part of the embarrassment of forming a cabinet arose from the problem of balancing the demands of the Partito Popolare with the prejudices of the Nationalists and the hatred of the Masons. The events of the last few weeks have shown

only too clearly how difficult will be the task of both Pope and Government in trying to serve their respective interests by establishing some kind of a modus vivendi that will permit of cooperation.

There can be no doubt that cooperation and harmony between church and state are desirable, if not imperative, for both parties. The aims and aspirations of the former are peculiarly involved with the policy and security of the latter. For the Roman question and the participation of the organized church in the political life of the Italian nation are by no means the only considerations that affect the relations between the Government and the Holy See. The vast influence of the church in certain foreign countries, with whose policy Italy is deeply concerned, is a factor that must be reckoned with by the Government. This is particularly true in the case of the countries formerly comprising the Austro-Hungarian Empire, and more especially in the case of the hostile Kingdom of the Serbs, Croats, and Slovenes, where the enmity of the Holy See might have a powerful influence to the detriment of Italian interests. The Yugo-Slavs in the past have not been slow to take advantage of the strained relations between the Vatican and the Government at Rome, and the perennial difficulty of the Adriatic question makes the attitude of the church in a country where its influence is so great a matter of prime importance. This is only to cite one instance in which Italian foreign policy and the security of Italian interests abroad may be greatly affected by the policy of the Holy See. Italy must likewise take count of the power of the Vatican in the Near East, in France, and in the South German States, in all of which her interests, political and commercial, are of vast importance, not to mention Brazil and the Argentine, where the interests of the very large Italian populations are the subject of parental solicitude to the Government, the more so as the emigrant remittances from the latter countries make up an important item in the overcoming of Italy's adverse trade balance.

These considerations add much weight to the motives that naturally urge the Italian Government to an understanding with the Holy See. The choice of a new Pope became, therefore, a matter of high political importance to the country. It is, of course, too soon to determine the attitude of Pius XI toward these questions, but it is reasonable to infer from his known character and past history that the Pope will continue the wise and conciliatory policy of his predecessor. The very first act of his pontificate was to appear in public, on the outside balcony of St. Peter's, then to give the apostolic benediction to the vast crowd gathered in the piazza; that is to say, in Italian territory. No Roman Pontiff since 1870 has thus appeared in his official and ecclesiastical capacity to an

assembly gathered outside of the extraterritorial precincts of the Vatican. Immediately afterwards Prince Chigi, marshal of the conclave, gave out the following official statement interpreting this unprecedented departure:

> His Holiness Pope Pius XI, with all reservations in behalf of the inviolable rights of the church and of the Holy See, which he has sworn to assert and to defend, has imparted his first benediction from the outside loggia, facing the piazza of St. Peter, with the particular intention that the benediction might be directed not only to those present in the piazza of St. Peter, not only to Rome and to Italy, but to all nations and all peoples whatsoever, and that it might carry to all the sign and prophesy of that universal pacification for which we all so fervently hope.

With due regard to the dignity and interest of the great organization of which he had just become the supreme head, the Pope could hardly have gone further in holding out the olive branch.

The continuance of Cardinal Gasparri as secretary of state may be taken as a reasonable guarantee that the Holy See is open to any advances that may be made by the Government. Liberalism is seated on the papal throne in the person of a scholar, a diplomat, a man of the world, and the cause of conciliation has less to fear from the traditional conservatism of the papacy than from the prejudice and political passion of the anticlerical groups in Parliament. Any Italian Government must reckon with these elements, and the statesman who can successfully negotiate a settlement and establish harmonious relations with the Vatican must be endowed with political wisdom and skill of the first order. So much of the old-time bitterness has passed away and so much positive good has been accomplished in the last few years that it is not unreasonable to hope that the near future may see the solution of the difficulties that for the last 50 years have hampered and vexed both parties in their respective legitimate fields. The election of Cardinal Ratti is the best of auguries for a fortunate outcome.

II. THE INTEREST OF THE UNITED STATES.

Within the scope of a brief review it would be impossible to indicate even the general outlines of the relations of the Holy See with the several powers of the world or the several political effects to be anticipated as a result of the election of the new Pope. Suffice it to say that these questions are of large importance throughout the world. Merely to cite the cases of Ireland, of the South German and Slavic States, and of Armenia is to suggest the widespread spheres in which Vatican policy is a factor that must be considered by those in interest. But the field is too wide for the limits of anything short of a volume, and this discussion will be confined to a consideration of the interest of the United States in the future policy of the Holy See as it may affect American affairs.

The Roman Catholic Church as organized and administered in the United States does not directly deal with or have a part in the National Government as is the case in most European countries by virtue either of a duly recognized concordat or by virtue of an avowed political party representing the Holy See. This is due primarily to the constitutional provisions concerning religious freedom, but is also due to the jealousy and suspicion with which clerical influence in politics is regarded by the vast majority of Americans, including many devout Catholics. It is unnecessary to recall the various societies, secret or otherwise, that have been formed for the express purpose of preserving the traditional independence of American Government from the supposed menace of clerical domination. Notwithstanding the watchful jealousy of the majority the indirect influence of the large and powerful Catholic minority has been immense and in recent years has been decidedly increased. It becomes pertinent to inquire into the extent to which this great force is directed by the center of Catholic authority, the Holy See of Rome.

The Vatican, never lacking in political sagacity, has perfectly apprehended the peculiar conditions under which its activities must be prosecuted in the United States, and has never attempted directly to interfere with the affairs of the Government or people. Even in purely ecclesiastical matters it is commonly understood that the American bishops and clergy have been free from the strict control of Rome to an extent unknown in any other country. The freedom thus enjoyed has bred in the American clergy a spirit of independence that has become a tradition, and it is not likely that the Holy See at the present time would attempt to change its relations with the church in America or to initiate a policy that might rouse opposition amongst clergy or laity. There are two fundamental reasons for this view: First, the Vatican is at present very seriously embarrassed financially, due to a number of causes connected with the war and the economic disorders of Europe, and the treasury of the Holy See must look to the large and prosperous Catholic population of the United States for a great part of its supply of funds. Under such circumstances it is safe to say that no policy will be attempted that might excite the hostility of Americans in general and of American Catholics in particular. Secondly, the Vatican is politically very fully occupied with the important problems affecting its interests in the reconstruction of Europe, in the evolution of Russia, and in the settlement of the several perplexing questions of the Near East. The time is therefore inopportune for initiating any new or militant policy in the United States, a country in which the interests of the church are being protected and furthered with zeal and sagacity by the American clergy themselves.

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It is not unreasonable, then, to assume that, whatever may be the policy of the new Pope and of his government with regard to other countries, no innovation may be expected with regard to the activities of the church in the United States. We must continue to look to the leading American prelates and to the various agencies under their control in order to ascertain the activities, ecclesiastical and political, that have now so large an influence in the life and affairs of the Nation.

The liberal disposition of Pius XI, no less than his already avowed purpose to promote the pacification of the world, justify the belief that he will avoid any issue with the American clergy that might result from an attempt to tighten the centralized control that functions at Rome. It is reasonable to suppose that the enlightened intelligence of the Pope will gladly accept the status quo so far as the church in the United States is concerned. It might, indeed, have been otherwise had the election gone in favor of Cardinal Merry del Val or of one of the ultramontane faction of which he is the acknowledged leader. The reactionary intransigeance of this element knows no compromise and would readily sacrifice expediency to an obstinate insistence upon the absolute authority of Rome. It is of no small importance to the future of the church that this group has again met with defeat in the conclave, and that the new Pope, like his immediate predecessor, is probably disposed to bend the policy of the church to accord with the sentiment of the times and with the expediencies of the general situation in the world.

It is therefore not unreasonable to conclude that our Government, for the immediate present at least, is not seriously concerned with Vatican activities in the United States, for the reason that the American clergy will probably continue to act with great independence. The case is very different, however, in other countries in which the United States has interests or obligations and in which the church exercises more or less influence upon political events. Cuba, the Philippines, Armenia, all of South America, and Mexico are examples in point. Clerical influence directed from Rome is powerful in all these countries. It goes without saying that the United States can be placed at great disadvantage in its dealings with such nations if the hostility, or even the indifference, of the clerical powers must be overcome. This is particularly true of the Latin countries, where differences of character, training, and temperament already interpose difficulties to the establishment and maintenance of harmonious relations. An attitude of helpful cooperation on the part of the Vatican may mean much to our own national interests in those countries. It is therefore at least expedient for the Government of the United States to inform itself upon the policy and activities of the Vatican in the several countries in which clerical influence counts and to

conciliate and cooperate with those powerful forces so far as may be consistent with our own aims and interests. Intelligent understanding of the activities of the Vatican is likewise imperative in those countries in which the United States has an interest or a mission of diplomatic or political character. The lack of such an understanding has been only too evident in recent instances connected with the peace conference and the problems growing out of the war.

The United States is at a decided disadvantage in dealing with political problems in which the Vatican is a factor, because it maintains no direct diplomatic relations with the Pope. The American Embassy in Rome is practically cut off from intercourse with Vatican circles by virtue of its very character as an embassy to the King of Italy, and no Government agency is charged even with collecting information regarding Vatican affairs, much less with dealing with the Papal Government. The resulting disadvantage was felt so keenly by Great Britain and Holland during the war that they established legations at Rome and sent ministers plenipotentiary, who have been maintained ever since. Likewise the resumption of diplomatic relations between France and the Vatican during 1921 may be ascribed rather to the disadvantages that the French Government felt in its isolation from the Vatican than to any national sentiment for reconciliation with the church. (See "La Reprise des Relations Diplomatiques avec le Vatican"; Jules Delahage, Plon; Paris, 1921.) The question of reestablishing relations with the Pope has been raised with some frequency in the United States of late years, and particularly since the example given by Protestant England, but the timidity of politicians has so far defeated any serious consideration of the idea.

Curiously enough, the American Catholic clergy are inclined to look with disfavor on the suggestion, and their opposition creates another obstacle. The reason for their attitude is that an American diplomatic mission to the Pope would tend to put the Vatican in close touch with American affairs, both ecclesiastical and political, and this is precisely what the American clergy least want. To cite the recent activities of the American clergy in behalf of Ireland is enough to indicate how annoying to them might have proved direct diplomatic representations to the Pope by a nonsectarian American Government. This very fact is the best of arguments for protecting our national interests by establishing a mission in Rome that would be directly responsible to the Government at Washington. At present the many necessary communications between the Government or its agents and the Vatican must be carried on through irresponsible channels, such as the diplomatic representatives of other countries or the American College in Rome, an institution wholly under the control of the American clergy. Such a system of communication is inappropriate,

inconvenient, and uncertain, and reduces the Government to a dependence upon the good will and good faith of the irresponsible agent that may be employed in each particular case.

Prejudice and political ignorance combine to prevent our Government from establishing so useful a mission as the suggested legation to the court of the Pope. Non-Catholics and anti-Catholics fear that such a step would involve the United States in Vatican intrigues, and, furthermore, they resent the political recognition of a sovereign who, to the non-Catholic mind, is no more than the high priest of a rival sect. It does not require any great political sagacity to grasp the fact that the United States has more to fear from the ungoverned activities of the Catholic clergy in America than from an established relationship with the Supreme Pontiff, a relationship that might be turned to such good account, both at home and abroad. As to political recognition of the Pope, this is accorded by every great power and most of the lesser powers of the world, and was always accorded by our own Government before the loss of the temporal power. Indeed, as late as 1872 an American minister was maintained at the court of the Vatican long after the Pope had been shorn of the temporal power over any territory but the limited precincts reserved to him under the law of guaranties. To deny political recognition to the Pope is to be blind to a political fact, a fact that is doubtless unpalatable to a great majority of Americans, but in the field of Government passion and prejudice can not prevail over reason and expediency without peril to the State.

The election of Cardinal Ratti, an Italian, to the throne of St. Peter has for the moment set at rest the wild rumors of the possibility of an American Pope. So long as the Roman question is open, and so long as the Holy See is at odds with the Italian Government, an Italian Pope is a political necessity. A foreigner on the papal throne would be at a hopeless disadvantage in approaching the question of temporal sovereignty, and no Italian Government could or would make concessions to a foreign ruler on Italian soil. However, it was surprising to note, in the days immediately preceding the conclave, how much talk of an American Pope was current in circles that should have been well informed and in any case are not to be regarded as naïve. Undoubtedly there has been discussion on the subject in high quarters, but it is well to remember that the church does not act rashly, and deals in centuries when others deal in decades or years.

A great deal of nonsense has been voiced on the subject of the failure of the recent conclave to await the arrival of the two American cardinals before proceeding to a final choice. As a matter of fact, the Sacred College acted precisely in accordance with existing papal legislation, which requires the conclave to assemble immediately

upon the expiration of the tenth day after the death of a Pope. It is true that the final election might have been delayed by an agreement amongst the cardinals to split their votes amongst several candidates until the arrival of the Americans. But such a course would have involved a violation of their oath to vote only for him who in their judgment was best fitted for the papal throne; and, furthermore, the Australian and Brazilian cardinals might well have claimed a like indulgence, which in their cases would have involved a delay of weeks. Public confidence in the integrity and honesty of the conclave was certainly strengthened by the prompt public announcement of the election before the arrival of any belated cardinals.

In spite of these obvious considerations of propriety and expediency, it is said in high ecclesiastical circles that at least one of the American cardinals was very wroth that the election was announced some few hours before his arrival in Rome, and that this particular eminence expressed himself on the subject in no uncertain terms. Undoubtedly it has been regarded in Vatican circles as unfortunate that the American cardinals did not participate in the election. The effect upon American Catholics is not lightly to be disregarded at a time when the American dollar has assumed an unwonted degree of importance to the treasury of the Holy See. The probable effect of this tempest will be an amendment of the regulations governing the calling of the conclave, so that in future every member of the Sacred College will have an opportunity to reach Rome in time to participate in the election of a new Pope.

These notes have not attempted to deal with the specific questions of Vatican policy that now concern and are likely in the future to concern the Government of the United States. Their purpose has been to indicate that the great spiritual aims of the Holy See are inseparably associated with political activities throughout the world and that the United States, no less than the other purely political governments, must take count of these activities that find their inspiration and directive force in the centralized Government at Rome. With 20,000,000 Catholics in the United States and a Catholic population in Cuba, Porto Rico, and the Philippines, with a profound political interest in the Catholic States of South and Central America, and an inevitable interest in the political tendencies of continental Europe, the United States can no more afford to ignore the powerful Vatican factor than it can afford to isolate itself from the activities of any body, political, ecclesiastical, or commercial, that plays a part in the affairs of the world. With the election of a Pope of liberal views, sympathetic to the spirit of free institutions and the thought of the modern world, the time is opportune for the United States to place itself in such relations with the Holy See that

the great force of the Catholic world may be turned to a helpful cooperation in the advancement and protection of our national interests.

THE JAPANESE SITUATION IN TSINAN, SHANTUNG, CHINA.

Source: American Consul.

15 February, 1922.

Japan continues quietly in possession and employment of interests seized during the war. A cautious and restrained policy has been continued in Shantung by the Japanese during 1921.

The situation at Tsingtau and the steps there being taken by the military government of occupation to consolidate and confirm Japan's economic control at that point we may well leave for the report of the officer on detail at Tsingtau.

Nor is it necessary to review Japan's holdings outside the Leased Territory, the railway, mines, military police control, the settlements at Fangtze and other points, the barracks and wireless station at Tsinan, and so on.

Suffice it to say that there has been no further apparent aggression by the Japanese during the year and that, while in no way relinquishing full control and enjoyment of the interests already seized, there has continued a studied effort to avoid both Chinese and foreign criticism and antagonism on matters relating to the administration and control of such interests.

There has been no complaint of discrimination on the railway; a few cases of petty annoyances have been reported in foreign circles, but they have usually been laid to the independent action of petty officials or employees. But, with Japan in control of the railway and of the terminal facilities at Tsingtau and of the customs at that point, the opportunity for interference with foreign business is always present, and there is the ever-present feeling on the part of foreign business men that their operations may at any time be the subject of discriminations or annoyances—not, perhaps, in the matter of freight rates or, openly, in the allocation of cars—but petty annoyances, the misplacing or misdirecting of cargo, intentionally careless handling, access to and improper use of information contained in shipping documents and invoices, etc.

The Japanese troops on station (number some 250) at Tsinan have remained quiet; they are little seen or heard. Their presence, however, undoubtedly is not without its effect in restraining depredations on the part of the unpaid Chinese soldiery in the vicinity of the provincial capital.

Along the line of the railway both the Japanese soldiery and the military police have apparently kept well within bounds.

Replacements of troops and changes of stations have repeatedly given rise to rumors both to the effect that Japan was reinforcing her military strength in Shantung and that she was beginning her withdrawal from the Province; but there is no substantial change in the situation from a military point of view.

The Japanese civilian residents of Tsinan have also been remarkably quiet during 1921. On one occasion only have they been heard and that was early in the year when (during the absence of the Japanese consul general), following a number of petty thefts from Japanese houses, the association of Japanese residents publicly announced the intention to organize a volunteer Japanese police for their own protection. The Chinese press became very much excited on the subject, but the matter was soon disposed of and numerous Chinese police boxes appeared before Japanese banking and business houses, indicating a special effort on the part of the Chinese police to afford more satisfactory police protection to Japanese residents.

The Japanese-owned Chinese newspaper at Tsinan, the Tsinan Jih Pao, has also shown more restraint in its comments and there has been less, although not an entire absence, of anti-American and anti-British and racial propaganda appearing in this paper, especially during the last half of the year. The only incident which has called for action or comment by the American consulate was the Japanese report (originating with this paper) of an alleged speech of the American consul agitating a Japanese boycott and other measures, which found its way into the press of Japan through the Kokusai Agency and the military intelligence service of the Japanese war office and resulted in considerable press comment. This incident offered an opportunity to disclose the Japanese character of this alleged anti-Japanese propaganda. Corrections and withdrawals were forthcoming, including a statement issued by the Japanese foreign office.

The anti-Japanese boycott in this district had already collapsed at the beginning of the year as an organized movement; Japanese goods appeared openly in the shops, and but little was heard of seizures by students or fines on Chinese merchants for dealing in "low-grade" goods until recently, when, with the agitation over the Shantung negotiations at Washington, some attempt has been made to revive the boycott. While it is reported that the Chinese merchants have agreed with the students to abstain from placing further orders for Japanese goods for the present, and to withdraw their stocks of Japanese goods from sale after a fixed date, the movement for an actual boycott is not organized and it is not anticipated that any real boycott will be attempted. It is, of course, true that a large number of Chinese still refuse to use Japanese goods when others are obtain-

able, but in the cheaper grades of goods supplies are obtainable only from Japan, and this situation is realized.

JAPANESE AIRPLANE FACTORY CONTEMPLATED.

17 March, 1922.

The Kawasaki Dock Co. is reported by the Japanese press to be contemplating the construction of an airplane factory at Kami-gahara, Gifu-ken. A large tract of land for this purpose has already been purchased and it is stated that the factory will equal in size the Salmson factory (France).

JAPANESE CARRIER PIGEON SERVICE.

17 March, 1922.

The Japanese Army pigeon service is based on French methods, and French equipment and French training methods, the chief instructor being a French subaltern, who, however, is returning home in April, 1922. The Japanese are not skillful in training pigeons, and the efficiency of the service will undoubtedly suffer after his departure.

Nakano, a suburb of Toyko, is the center of pigeon instruction. In May, 1921, there were 10 fixed lofts at that place, each holding 112 pigeons. There were also two fixed mobile lofts there, each holding 70 pigeons. Another loft of 60 pigeons was used in training pigeons to fly to a determined place and then return to the loft.

The ordinary mobile loft holds 60 pigeons. One is stationed near general staff headquarters and there is one each at various schools in the vicinity of Tokyo.

In the grand maneuvers of 1921 pigeons were used between division and army headquarters and by umpires. About 350 were used in the maneuvers, having been previously trained for about one and a half months on the maneuver ground. One mobile cote operated by the Japanese alone (without French assistance) lost one-half of their pigeons on the first day of the maneuvers.

JAPANESE AERIAL TORPEDOES.

17 March, 1922.

The Japanese naval air service has no real aerial torpedoes. They are now using for training purposes old 14-inch torpedoes taken from some of the older torpedo boats.

It is, however, most probable that the British aviation mission will encourage the navy department to either purchase or manufacture aerial torpedoes at an early date.

JAPANESE BOMBS.

17 March, 1922.

At present the Japanese naval air service has no bombs with the exception of a few standard R. A. F. types brought over by the British aviation mission.

It is to be expected that the navy will begin to manufacture bombs of the above types as soon as the mission leaves the country, if not sooner.

JAPANESE MINE-LAYING PLANES.

17 March, 1922.

The naval aviation service has no mine-laying planes or equipment.

The short *F-5* flying boats and the Vickers *S. S.* airship might, if the occasion required, be used to a certain extent for this purpose.

JAPANESE AMMUNITION PLANTS.

17 March, 1922.

The Government ammunition plants in the vicinity of Tokyo were inspected February 20, 1922.

Number of plants.—Three.

Names, size, and location.—Itabashi, 78 acres, 5 miles from center of Tokyo northeast; Juho, 103 acres, adjoining Itabashi on the east; Oji, 33 acres, three-fourths mile east of Juho.

General.—All plants are administrative branches of Tokyo Arsenal.

Itabashi.

A large, excellently equipped, and arranged plant, comparable to anything in the United States of a similar nature. The small arms powder for the entire army is made here. Capacity not divulged to inspector, but apparently sufficient and capable of expansion if necessary. Work at present is slack, with only 600 employees. The powder produced is a bluish gray thin nitrocellulose flake, each flake about one-sixteenth inch square. The cellulose is not nitrated here but at Oji (described later). In addition to small-arms powder, the paper containers for high-explosive shells are filled here, using T. N. T. and a picric acid explosive, and sent out to regiments for insertion into projectiles. The containers for both field and coast artillery are filled at this plant. The picric acid explosive referred to is a yellow powder described later. This explosive and T. N. T.

are the only two high explosives used by the army as shell fillers, so the guide said. The navy still uses Shimose.

Another section of this plant manufactures fuses and primers of all descriptions. Equipment is sufficient and up to date, but machines are largely of foreign make, principally from the United States (Brown & Sharpe's). Work at date of inspection was very slack with most of the machines out of use.

Juho.

This plant is, I believe, not inferior to any of a similar nature in any country. Machinery is sufficient and buildings are large and well arranged. The rifle and machine-gun ammunition for the entire army is made here. Machines and materials are similar to those used generally in other countries and will not be described. It is sufficient to say that the plant can care for a tremendous demand for small-arms ammunition. The great activity in this plant was in some contrast to the lack of activity in all the others.

Oji.

This plant produces the nitrocellulose for small-arms ammunition, T. N. T., and "yellow powder" (a picric acid high explosive). At a plant near by is produced also mercury fulminate, but this plant was closed to the inspector. Alcohol and ether are purchased from civilian factories. Both sulphuric and nitric acids are made here in quantity, but these chemicals are purchased from near-by civilian factories if the local supply should be insufficient. The pyrites for the sulphuric acid are produced in Japan. Nitrate for nitric acid is bought from Chile. Phenol for picric acid is purchased from civilian firms. Cotton for nitrocellulose is waste bought from spinning mills, but these in turn import it. Benzine for T. N. T. comes from gas and coke plants. The equipment of the plant is excellent and assuming plenty of raw materials, of sufficient capacity to fill large orders. At present, work is slack, but the men are kept on to avoid labor trouble. This attitude toward employees is not peculiar to Government factories.

Nitrocellulose for cannon is not made at this plant, but at Osaka. "Yellow powder," used as a shell filler, is in odor and general physical characteristics similar to our explosive D. However, it is first melted and run into a stiff paper container before insertion into the shell.

No black powder is made at any of these factories, but at Megura, near Tokyo. This plant is to be turned over to civilian control. No explosive of any kind for army use, except dynamite, is at present made by civilian factories.

REDUCTION IN JAPANESE ENLISTMENTS.

17 March, 1922.

The Japanese press reports that, as a result of the Washington conference, the enlistment of naval volunteers will be reduced this year as follows:

	Original number to be enlisted.	Revised number to be enlisted.
Yokosuka	2,074	1,224
Kure	1,949	1,150
Sasebo	1,748	1,031
Maizuru	853	504
Total	6,624	3,909

RETURN OF ADMIRAL BARON T. KATO, I. J. NAVY, TO JAPAN.

17 March, 1922.

On 10 March, at Yokohama, Admiral Baron Kato, Japanese chief delegate to the Washington conference, and Mr. Hanihara, vice minister of foreign affairs, were welcomed back to Japan by a group of high officials and naval men.

Ample police protection was provided both in Yokohama and Tokyo and three or four ringleaders of a crowd of hostile demonstrators at the Yokohama wharf were promptly arrested, which prevented any disagreeable incident.

The returning delegates were met on board the steamer by Count Uchida (minister of foreign affairs), Admiral Togo, Governor Inoue, Admiral Yamaya, Admiral Yamashita, Prince Tokugawa, Baron Ijuin, and Mr. K. Otani.

At the Tokyo station they were met by Count Chinda, the American ambassador, the foreign naval attachés, and many distinguished officials of the Government.

The address of welcome was made by Governor Inoue, who expressed briefly the pleasure of the people of Japan at the return of the delegates. He said that the people as a whole are satisfied with the conference, and that "Japan must be pleased because the conference made Japan understood by other nations." He proposed the health of the returning delegates.

Admiral Kato had a prepared statement ready for distribution to members of the press. In part it was as follows:

During the conference for three months the delegates of the various countries maintained throughout a frank and straightforward attitude in exchanging views; especially about the question of the limitation of armament they dis-

played a sincere desire for peace and strenuously endeavored to attain the object of the conference in a spirit of compromise and conciliation and by striving to merge their minor differences in the interest of the common good of the world. Thus the conference has been able to achieve satisfactory results.

Seven treaties were signed as a result of the conferences and of the separate negotiations outside the conference. These treaties and resolutions represent the tangible results of the conference. When these results are considered separately and one by one or from the viewpoint of one particular country alone there may be possibly room for criticism and dissatisfaction. But when they are considered in the aggregate and from the larger point of view it will not be difficult to concede that the conference has made a long step forward to the establishment of the world's peace—a step toward the realization of a desire cherished by all mankind—in that the conference has brought the nations to a better understanding and greater friendship and in that it has rendered possible a considerable curtailment of the burdens on the shoulders of the peoples.

These achievements of the conference were made possible largely because of the newly awakened conscience of the nations, which, pained by their bitter experiences of the last war, have become keenly alive to the necessity of amity and cooperation among them and have come to evince a spirit of concord and conciliation, each being prepared to make necessary sacrifices for the promotion of the common weal of mankind. In other words, the results of the conference represent a triumph of a sound public opinion. It is the President of the United States who has enabled the realization of this triumph, and the thanks of the world are due to him. It is confidently hoped that the nations will hereafter unite in their best endeavors to secure a still greater measure of realization and advancement of what has been so happily initiated and accomplished by the conference. We are convinced that this is also the intention of our people.

[Interpellation of Admiral Baron Kato, Minister of the Navy, at the Budget Committee meeting on 15 March, 1922.]

The admiral declared that the 5–5–3 ratio was accepted only after an agreement had been reached, especially with America, on fortification of Pacific possessions.

In reply to questions he said that he did not plan to make any material change in the present program for the building of submarines and auxiliary ships (light cruisers, destroyers, airplane carriers, tankers, and tenders) and promised to reduce the naval expenditures as much as possible.

Japan from the first considered 70 per cent necessary to safeguard her interests and the delegates never received instructions from home in regard to the ratio. The American proposal of a 60 per cent ratio for Japan was based on the existing naval strengths of the countries. There was some confusion as to the data used by America, as ships under construction were included while ships already completed were excluded. We demanded a 70 per cent ratio and included the *Mutsu*. We realized the necessity of demanding this, but did not insist. On the contrary, we sought to arrive at a satisfactory agreement by mutual concession. The success of the conference was considered advantageous to the real interest of Japan. The United States also approached the question with the spirit of concession.

America is ruled by public opinion and the Government frequently has to change its policy due thereto. There is reason to believe that it was difficult and troublesome for the American delegates to limit Pacific fortifications. The ratio was accepted on condition that the fortification question be settled.

Admiral Kato said, in answer to a question, that he had not consulted the naval council or the naval general staff.

He said that America considered the *Mutsu* incompleted because notification of completion of vessel had not been received.

The minister denied the accusation that his failure to note the completion of the *Mutsu* had seriously impaired the country's interests. He consented to the fortifications agreement under the belief that the Bonins and Oshima were included in Japan proper.

He stated in reply to questions that he had no intention of affecting material change in plans already laid regarding construction of submarines and other auxiliaries, nor of increasing the strength provided under the present plans. As for readjustment of auxiliary ships, he acknowledge its necessity.

EXCERPTS FROM THE PROCEEDINGS OF THE JAPANESE BUDGET COMMITTEE.

15 March, 1922.

Mr. Yoku Egi. The Foreign Minister has stated that the reasons why the 5–5–3 ratio was accepted were that the maintenance of peace could be assured and that the construction of fortifications could be restricted. Why should the fact that the United States regarded fortifications in Hawaii to be necessary and fortifications in the Philippines to be unnecessary cause Japan to make any concessions with respect to the naval ratio?

Admiral Kato. I shall briefly describe the course of events leading up to our acceptance of a 60 per cent ratio. We have hitherto regarded and 8–8 navy as necessary for our defense. Now, the United States was recently following up one naval expansion program after another, so that our naval experts, when endeavoring to ascertain what percentage of the Navy of the United States should be owned by us, were unable to decide upon any fixed ratio. They thought, however, that a ratio of 70 per cent would represent a desirable relation of naval strength. I must add that we presented ourselves at the conference without any instructions from the Government with respect to this question. Mr. Hughes's proposal of November 12 was stated to have been based upon calculations of existing naval strengths, but we were in doubt as to the significance of this term. It appeared that the United States had included vessels under construction, whereas Japan had not. It was then concluded that the

matter would require further discussion, and accordingly informal negotiations were arranged between the delegates of the United States, Great Britain, and Japan. I did not at this time submit any concrete proposal, and during the week following the reference of the question to the committee of naval experts no formal exchange of views took place. The naval experts, on the other hand, while arriving at an agreement on general principles, permitted their discussion of actual ratios to degenerate into useless argumentation. The delegates then concluded to take matters into their own hands. At this point I wish to state that owing to certain reasons it was decided to hold back any proposal to restrict fortifications until a favorable opportunity presented itself. I give away to no one in advocating the desirability of a 70 per cent ratio, but I do not believe that ratios are determined merely by figures. Believing that it would be highly advantageous to our country were the conference successful, I adopted a policy of concession rather than one of insistence upon figures. The United States was also striving for a successful conference, so that the negotiations necessarily shifted over to a discussion of the fortification question. When the 60 per cent ratio was definitely accepted, no pronouncement was made in regard to existing naval strengths.

Mr. Egi declares that the United States had laid down a definite policy with regard to its fortifications at some time prior to the opening of the conference, but I know that this was not the case. As you are probably aware, the United States is governed by public opinion, which frequently forces the Government to reverse its policies. It so happened that the United States had been anxiously awaiting an opportunity to present proposals for the restriction of fortifications; and as the subject had not then attracted any attention the United States prepared a concrete plan which it submitted to the delegates of the five principal powers at their session on December 15.

Mr. Egi. Did you consult with the naval council or the naval board of strategy before accepting the ratio?

Admiral Kato. This was a question for decision by experts and not by departmental deliberations.

Mr. Egi. The Minister of Marine states that the 60 per cent ratio was accepted on condition that an agreement could be reached with respect to fortifications, but the Premier and the Foreign Minister declared that they agreed to the ratio in order that the maintenance of peace might be assured.

Why was not the *Mutsu* regarded by the United States as fully constructed?

Admiral Kato. The convention on fortifications was regarded as conditional to our acceptance of a 60 per cent ratio. The four-

power treaty was not so regarded, although I believe it to be imbued with a spirit which makes it a powerful factor in the preservation of peace. The *Mutsu* had been completed, but the United States Government had not been so notified.

Mr. EGI. Why was not an announcement of the completion of the *Mutsu* issued sooner than it was? Are you, as Minister of Marine, prepared to accept full responsibility for the security of the nation?

Admiral KATO. Regulations prescribing the procedure to be followed in making announcements of the construction of new vessels are in force, and they must be observed. It should also be borne in mind that had we sent an announcement of the completion of the *Mutsu* to the United States we would not have been allotted 10 capital ships. I am quite prepared to accept responsibility for our defenses.

Mr. EGI. Did you send any notification with regard to the vessel's completion?

Admiral KATO. I did not. The powers were notified, however, that the *Mutsu* would be completed during November.

Mr. EGI. The fact that the *Mutsu* on November 12 was regarded as 98 per cent completed was then quite natural. It is greatly to be deplored, however, that this worked to the detriment of the Empire. Do you agree with the view that the term "Japan proper" includes the Bonin Islands and Amami-Oshima?

Admiral KATO. Whether or not it was natural that the *Mutsu* should have been regarded as 98 per cent complete is a matter of opinion but it is of little practical moment, as it did not work to the detriment of the Empire. In the original draft of the agreement the term "mainland" was used, but this was changed to "Japan proper." At that time these islands were not even mentioned.

Mr. EGI. Did you not come to some understanding before you definitely accepted the agreement?

Admiral KATO. Certainly.

Mr. EGI. It is most unfortunate that the conference did not arrive at any decision with regard to auxiliary vessels. Do you intend to increase the number of such vessels in our navy?

Admiral KATO. I do not intend to effect any change in our present plans. That is to say, we may decide to make some alterations as to their size and model, but not in the number.

Mr. EGI. This statement refers to submarines also?

Admiral KATO. Yes. There will be some adjustment with regard to subsidized merchant vessels, but no definite plans have as yet been made.

TOKYO NICHI NICHI.

16 March, 1922.

Count MICHIMASA SOYEJIMA. It is to be regretted that we did not proceed more boldly in our contention with respect to the *Mutsu* and a 70 per cent ratio. Do you consider it necessary to apply the sums saved by the naval limitation agreement to an extension of our defenses?

Admiral KATO. President Harding stated that although it might be possible to bring about a limitation of armament, it would be impossible to do away with war. He is correct in a certain sense; it may not be possible to abolish war, but we should nevertheless strive to abolish it. Complete disarmament can only be brought about by degrees. It is my opinion that we may adjust our naval defenses so long as the terms of the agreements reached at Washington are not violated.

Baron YOSHIRO SAKATANI. The conference has accomplished what other conferences have not, and we therefore pay that respect to our delegates which is their due. There are, however, certain unsatisfactory features in the agreements reached. Did not the inclusion of the *Mutsu* among vessels allotted to us increase the burden of taxation on the British and American peoples?

Admiral KATO. An agreement which would be satisfactory in every way to all the participating nations is more than could be expected. I believe that the revival of the *Mutsu*, even though it gave the United States and Great Britain two more vessels, works to our advantage.

Baron SAKATANI. How will the sums saved by a reduction of armament be applied?

Baron KATO. No definite plans have as yet been made, but a commission is now engaged in a study of this question. I contend only that it should not be diverted to any purpose which will contravene any of the principles defined by the conference.

Baron SAKATANI. In view of the fact that our fortifications in the Bonins and Amami-Oshima have not been completed, why were they set off in the fortification agreement against Hawaii?

Admiral KATO. *Our principal objective was to remove anything which might be regarded as a threat against Japan. In other words, we were not concerned with islands which were unsuitable for use as naval bases, even though they might be heavily fortified. Furthermore, the fortifications in the Philippines have not been completed. In short, a maintenance of the status quo was highly desirable from our standpoint.*

Mr. EGI. The Minister of Marine gave us to understand just now that the fortifications in the Philippines affected Japan. There is

some discussion in the American Senate as to the advisability of placing a reservation on the applications of the agreement to the Philippines. In case such a reservation is made, will it affect the ratification of the agreement by Japan?

Admiral KATO. I am firmly convinced that the American Senate will ratify the agreement. I therefore think that it would be improper for me to indulge in speculations.

Mr. EGI. The Minister of Marine made some allusion to some special significance embodied in the four-power treaty. Is there any connection between this treaty and the fortification agreement?

Admiral KATO. The four-power treaty has no meaning other than that which it purports to have.

Mr. EGI. What is the substance of the discussion in the American Senate with regard to the treaty? How does the Government view the recent pronouncement of President Harding concerning the Ishii-Lansing agreement?

Count UCHIDA (Minister for Foreign Affairs). The Government has not received any official report from its representatives in the United States on the discussion in the Senate. The imperial ambassador reported that President Harding had expressed an opinion as to the validity of the Ishii-Lansing agreement and that it was now a topic of discussion in the Senate. I shall therefore refrain from any statement at this time.

JAPANESE ACTIVITIES IN GERMANY.

23 February, 1922.

The negotiations are carried on by a group of Japanese of all categories, who under the pretext of business or study have poured into Germany since the signature of the peace treaty.

A Japanese mission has signed contracts with the two electrical concerns: A. E. G. (General Electric Co., Rathenau) and Siemens (Stinnes).

According to certain information which has been received, the Japanese have endeavored and partially succeeded in obtaining information regarding artillery and asphyxiating gases. In this way they are said to have purchased the plans and manufacturing secrets of the latest model of German gas shell.

The Japanese Government is also said to have made offers to Herr Crautz, the best-known specialist on ballistic questions; regarding his going to Japan. It is said that he was offered a sum of 2,000,000 yen simply to indemnify him for the trouble attendant on making the change. Herr Crautz is said to have refused.

The principal intermediary used by Japan in the purchase of material is a certain A. Schinzinger, a German subject and consular agent of Japan at Berlin, 4 Hindersinstrasse, Berlin, N. W. 40. Telephone: Moabit 736.

This individual was Krupp's agent in Japan. He is said to have been the intermediary in procuring for the Japanese, if not the material itself, at least the plans, formulas, and manufacturing secrets relative to artillery and military gases.

Through the mediation of the Krupp company, Schinzinger is said to have received a recommendation to the Deutsche Bank, although this institution is probably not au courant with the activities of the person in question. Armed with this recommendation, he presented himself to various export companies in Berlin regarding the shipment to Japan of a number of cases filled with German guns.

The firm of Stephen & Heyman, 14 Tauenzienstrasse, Berlin, interested in aeronautical affairs, is engaged in negotiations with the Japanese either directly or through the mediation of Schinzinger.

BASES IN THE PACIFIC.

Source: Admiral Joseph Strauss, Commander in Chief Asiatic Fleet.

6 February, 1922.

Bases in the Pacific:

Coast bases.
Pearl Harbor.
Guam.
Philippines.

The possibility of a war in the Pacific Ocean is heightened by the scarcely concealed intention of Japan to absorb at least the economic control of the vast and rich territory of China. We have learned by experience that wherever Japan has become dominant she has managed to exclude almost wholly the commercial activities of other nations from the country dominated. Korea has been absorbed politically. In the Japanese yearbooks South Manchuria is included in the domain of Japan.

Japanese activities are not confined to North China. She controls important industries in the Yangtze Valley and is very active in Fukien, but so far without having attained much of a foothold. Her ambitions in this Province are stimulated by its proximity to Formosa. As her grip in various parts of China tightens we may expect the history of Manchuria to be repeated and in the end we will be cut off from trade with practically a quarter of the population of the world save by paying toll to Japan for the privilege.

We can accept this possibility peacefully if we choose, or take a firm stand and demand that the integrity and independence of China be preserved. Such a stand may lead to war sooner or later, although the war will be deferred as long as Japan can attain her ends by bluffing. This is what she is doing now, and it seems to succeed. No nation stands as high in the esteem of China as we do, and this friendship would be of immense value to our trade if we could and would take advantage of it.

Lack of solidarity in China makes it impossible to count on her as a preserver of her own integrity and independence. This is due to the magnitude of the country; scant means of intercommunication, which in turn has prevented a common spoken language; ignorance of the most numerous class, and their thraldom to her provincial governors, who maintain their positions by troops entirely under their own control—paid by them from money they themselves collect from the people. These provincial governors are not absolute; they may be deprived of office, not by the free act of the central Government at Peking, but by combinations against them of other governors. The governor of Nupeh was removed last summer because he could no longer command the loyalty of his soldiers owing to his having punished them for looting and burning the city of Wuchang. Having lost his troops, he could not retain his office; it was an easy matter then for Peking to replace him. The most powerful man in China to-day is Chang Tso Lin, military governor of Mongolia. He is clever, energetic, and maintains a large, well-equipped army, well and regularly paid. It is claimed by his enemies that he is unscrupulous and a hireling of Japan. He met our minister, Mr. Crane, in Peking in May, 1921, and solemnly assured him that his one aim was to get rid of the Japanese. I thought Mr. Crane was a little impressed with his sincerity when he told me of his interview the next day.

If all of the military governors would unite loyally under a common head at Peking, that Government would have to be reckoned with against the machinations of Japan. At present that condition seems to be unattainable.

It is unnecessary to dwell on the question of the good faith of Japan with respect to her international engagements and promises. That is an open book which anyone may read who has studied the history of the Far East since the Russo-Japanese War. Whether or not her ambition will lead to a war with the United States rests entirely on our own policy.

II.

A war between the United States and Japan would have its theater in Asiatic waters, and on the mainland of China, provided China be-

came our ally. It is evident that without control of the sea we could not wage such a war. If our fleet were destroyed, the war would end at once with our defeat. On the other hand, our control of the sea would not end the war so far as Japan is concerned. She is too near to Korea and the Chinese mainland to make it possible to shut her off from supplies from these countries except under the greatest difficulties. In the World War, England found little trouble in keeping up her line of communications with her operations on the continent of Europe, notwithstanding the sea activities of her enterprising enemy. To be sure, Germany did not control the seas, yet she had in use just such means as we would be compelled to employ in hindering Japan's communications with the mainland; namely, destroyers and submarines. First, the enemy battleship fleet must be destroyed so that the long pathway across the Pacific would be reasonably clear for our carriers of men and munitions; next, the enemy trade with Europe must be cut off by our cruisers; and, finally, her own territory must be isolated until she yields to economic stress or starvation.

Our real base for these operations is the west coast of the United States. It is the farthest outpost which may be supplied without hindrance. But it is 4,500 miles from the seat of war and submarine with its long-steaming radius has rendered any control of the sea imperfect. If a reservoir of men and munitions can be maintained at Pearl Harbor the distance is reduced to 3,400 miles and the hazard lessened accordingly. But no matter how extensive our preparations at Pearl Harbor, the provision at that base must be replenished from time to time by supply movements from San Francisco. These will be less frequent and therefore may be better guarded. Pearl Harbor has a fine dock and repair plant; they are too far away to be very useful in a war with Japan. As an example of the pressure that war exerts to lessen the distance between the rendezvous and the base, we have the case of the British Grand Fleet at Scapa Flow. Prior to the war work was begun on a dockyard at Rosyth, in the Firth of Forth, and it would seem logical to have hurried along the shops there and to have provided a floating dock until the graving docks were completed. There were at Leith considerable docking facilities for cruisers. Nevertheless, an entirely new plant was constructed in Cromarty Firth and a floating dock capable of handling all but the largest battleships was towed to that place from Portsmouth. It is about 210 miles from Scapa to the Firth of Forth and only 90 miles to Cromarty Firth. Cromarty Firth is the northernmost harbor on the coast with railroad communications to the rest of Great Britain, but it was selected in spite of the increased difficulty of operation in winter from weather and diminished daylight.

Pearl Harbor is not a good base for a war with Japan; it is only a way station.

Guam is our next possession toward the enemy. Here the distance to the seat of war is reduced to 1,350 miles—a stretch still long enough to hamper us, but it would be our nearest possible outpost, and it would have to suffice. To make it useful, wharves, docks, warehouses, barracks, and a breakwater must be built; the harbor must be dredged—all very costly and probably out of the question.

The seizure of a near-by base would hardly solve the problem. Wounded or disabled ships must be provided for and that requires a dry dock. We could not hope that a floating dock would escape the hazards of being towed from Manila, much less from Pearl Harbor or the United States. We now turn to Manila as a war base. The distance from home is now increased to over 6,900 miles, with a stretch from Guam of 1,500 miles. In this discussion Yokohama is assumed to be the objective as a matter of convenience only; operations would probably be centered at some point to the westward, not far from Tsushima Strait.

Manila presents the disadvantage of increased distance from our own real base of supplies, San Francisco, but it is actually closer to Tsushima Strait than Guam is, and about one day farther to Yokohama. Both routes are flanked by Japanese islands, and there is not much to choose between them in this respect. The prime advantage of Manila rests upon the fact that it is situated on a commodious bay, whose entrance is impregnably fortified, and this bay is closer to the probable sea activities than any place we have or are likely to get. Manila is a large city, where an ample labor supply, both skilled and common, may readily be had; two docks capable of handling vessels of destroyer size, and one of them may even take a ship of 2,000 tons. Then we have the Dewey, for which a place could easily be dredged in Canacao Bay; our own shops at Cavite and a considerable repair plant at the city of Manila. Moreover, it lies on the flank of Japan's trade route to Europe, only a day's steaming for a destroyer, and not much more for the submarines.

It is probable that in the course of time the independence of the Philippine Islands will be granted. It is to be hoped that we will retain a stronghold there as an outpost for our commerce in that part of the world, whose commercial importance is always increasing; as a resting place for our fleet; a fuel station for our commercial carriers.

The selection of a base location in the Philippines is bound up with the question of the independence of these islands. If their independence is granted, for reasons given above the selected base must be

in the vicinity of or in Manila Bay, which is guarded at the sea entrance by Corregidor and other forts. It may be urged that an independence in which we retain the key to their capitol is too incomplete to be satisfactory to the Filipinos. Too much weight should not be given to such a claim. England holds Gibraltar, which in a way modifies the independence of Spain; nevertheless, this condition has obtained for over two centuries.

Inasmuch as Cavite is now a base already providing valuable facilities for a fleet, the question ought to be settled by deciding to retain the peninsula embracing Cavite and Canacao. The Army, however, gives the opinion that the territory is pregnable from the landward side, although the enemy's advance to a point that would actually threaten Cavite could be hindered for a month or so under existing military conditions.

If in this time it were possible for our fleet to arrive, an attack in this direction would be abortive. If the fleet is in such a state of unreadiness as to bar this hope, it would be better to turn to Marivales Bay. Very much can be urged in favor of Marivales Bay. It lies directly under the guns of Corregidor and could be held indefinitely. It is said to be a good typhoon harbor and is in other respects excellent. It is somewhat limited in area. On the other hand, it is 30 miles from Manila, and United States shipping would be compelled to stop there for refueling, instead of having this service performed coincident with the stop at Manila during the conduct of its other business in the port. Then, again, it would be necessary to build up a community to support its repair and supply facilities with the objectionable and expensive obligations that are always entailed by such schemes. Cavite lacks area and depth of water. Correcting the latter defect will also correct the former. The bottom is such that it can easily be dredged by hydraulic dredging and the débris deposited inside riprapping.

It is well to bear in mind what the possession of the Philippine Islands would mean to Japan. She has repeatedly disclaimed any ambition to absorb them; nevertheless, we are from time to time advised that her agents have been encountered in the islands, whose activities indicated secret intelligence work. There are many Japanese in the Philippines and a considerable colony in Mindanao. With the possession of the Philippines, Japan would have a chain of islands from Sakhalin to Jolo, extending practically through 49 degrees of latitude and bringing her close to the Dutch East Indies. This chain would hem in all of China and Siberia and constitute a sea barrier from the Pacific Ocean that might have serious effects on the destiny of a large part of the world. We should at least have one stronghold there to protect our rights.

MEXICO.

Source: Military Intelligence Division.

22 March, 1922.

ESTIMATE OF THE POLITICAL-MILITARY SITUATION.

PRESENT SITUATION.

According to the Constitution of 1917, Mexico is a democratic, Federal, representative Republic consisting of States free and sovereign in all that concerns their internal affairs, but united in a federation.

The executive power of the Government is vested in a President, elected by a direct popular vote for a term of four years, assisted by a Cabinet of eight secretaries.

The legislative power of the federation resides in a Congress composed of a House of Representatives and a Senate.

Mexico is divided into 28 States, 2 Territories, and 1 Federal District; each State has its own constitution and laws: State governors, members of legislature, and judicial officers are popularly elected. The governors of the territories and the Federal District are appointed by the President.

The present political régime in Mexico is the outcome of the successful revolution against Carranza in April–May, 1920. Gen. Adolfo da la Huerta was chosen provisional President by the Mexican Congress under the "Plan of Agua Prieta," which embodied the revolutionary program and recognized the Constitution of 1917. Presidential elections held September 5, 1920, resulted in the election of Gen. Alvaro Obregon, and his inauguration on December 1, 1920.

The important political parties are as follows:

PARTIDO LIBERAL CONSTITUCIONALISTA (known as the P. L. C.).

This party, which elected Obregon to power, stands for the Constitution of 1917. In the elections for the standing committee held before the adjournment of Congress December 30, the P. L. C. was defeated by a coalition group, which succeeded in electing its members. While this standing committee has little legislative authority in the interim sessions of Congress, it has the one important power of naming the successor to the presidency in the case of the death or total disability of the Executive.

CONFEDERACION NACIONAL REVOLUCIONARIO.

The new coalition group which defeated the P. L. C in Congress has formed a new party, known as the Confederacion Nacional Revolucionario. It is composed of widely separated elements, including the radical socialists and the principal socialist leaders in the country. It appears that the aims of this party are to establish a régime even more radical than the present one.

CONSERVATIVE PARTY.

At the present time the Conservative Party may be said to include the landowners and members of the old "Cientifico" or Church Party, which advocates the return of the Constitution of 1857. This party has taken a decided stand against socialism and the evils for which it stands.

NEW POLITICAL PARTY.

According to the press, the organization of the "Gran Partido Liberal" or the Great Liberal Party of Mexico, was announced March 1, with Senator Fernando Iglesias Calderon as its leader. Its platform provides for a moderate policy between the conservative constitution of 1857 and that of 1917. The deciding factor in the power of this party will depend on the degree of success obtained by it in the coming elections for senators and deputies in Congress. Senator Calderon has always stood for law and order and is firmly opposed to the policy of expropriation of property without indemnification of the owners. His previous record affords an element of strength to the party.

In regard to foreign relations, one of the important phases of the Mexican situation is the question of recognition of Mexico by the United States. On May 27, 1921, the American chargé at Mexico City presented to General Obregon a treaty of amity and commerce, covering the points that the United States requires before recognition can be granted. From the public statement issued June 7 by Mr. Hughes, Secretary of State, concerning the policy of the United States toward Mexico, the following is quoted:

> In short, when it appears that there is a Government in Mexico willing to bind itself to the discharge of primary international obligations, concurrently with that act its recognition will take place. This Government desires immediate and cordial relations of mutual helpfulness and simply wishes that the basis of international intercourse should be properly maintained.

President Obregon's message to Congress September 1, 1921, contains the following statement concerning the treaty of amity and commerce:

> The Government of Mexico does not believe it possible nor convenient or necessary to sign such a treaty, under such conditions, if it is to be signed prior to recognition or signed simultaneously with recognition.

Mexico has been granted recognition by nearly all the foreign Governments except Great Britain, France, Belgium, and the United States.

FUTURE SITUATION.

There are five principal factors which to-day challenge the stability of the Government of Mexico under the administration of Gen. Alvaro Obregon. These, in the order of importance, are as follows:

(*a*) The increased revolutionary and bandit activity.

(*b*) The progress of radical socialism in the more densely populated districts.

(*c*) The application of the agrarian law in the industrial and commercial centers.

(*d*) The questionable loyalty of officers in high command and discontent in the rank and file of the army.

(*e*) Lack of funds for administrative and other purposes.

The increase of revolutionary and bandit activity is an outstanding feature of the Mexican situation and it is believed that the administration is apprehensive of trouble that may take the form of serious revolutionary disturbances, as is evidenced by an increased activity in troop movement to sensitive points within the Republic.

The radical socialist movement has progressed rapidly under the present régime. The establishment of socialist governments in the States of Yucatan, Puebla, Michoacan, Vera Cruz, and Jalisco, and the promulgation of socialistic and confiscatory laws by these State governments (with the apparent support of the Federal Government) has caused a state of upheaval in these districts, greatly intensified within the last few weeks, especially in Michoacan. Protests which have been made to the central Government against these drastic measures might easily take the form of organized rebellion against Obregon, aided by rebel bands operating in a number of States of the Republic.

The agrarian law or policy is concerned with the partition of lands and grants under the Federal Constitution of 1917, and affects both domestic and alien property rights. Under article 27 of the constitution, little legal progress in agrarian matters can be made in any State until the State legislature has passed an adequate law giving effect to the principles of this article; however, this fact has not deterred the former Secretary of Agriculture from breaking up many haciendas in States where no such law had been passed. The application of this law has fostered labor unrest, paralyzed industry, and reduced the confidence in property rights and the power of the courts, and has had the effect of rapidly alienating from the administration the support of the conservative elements.

There is reason to believe that general dissatisfaction exists among the rank and file of Federal troops, especially among those stationed in the border States.

These and other conditions, if allowed to continue unchecked, constitute a formidable array of difficulties sufficiently potent to cause the overthrow of the Obregon régime. While the present serious situation may blow over, there is believed to be a possibility of serious disturbances in the near future, which might come suddenly in the form of a coup d'état.

MEXICAN MILITARY EXECUTIONS.

Source: Military Intelligence Division.

17 February, 1922.

EXECUTION OF GENERALS PRUNEDA AND RUIZ.

A sensation was caused by the sudden execution early on the morning of 14 February, 1922, of Gen. Antonio Pruneda at Mexico City and of Gen. Antonio Ruiz and Capt. J. Lugardo Perez at Chihuahua. These officers were brought to trial, condemned to death, and executed within the same period of 24 hours or less.

General Pruneda, who had been years in the Federal Army and had held various important commands, was recently commanding general ("chief of operations") in the State of Coahuila. The charges against him alleged, in substance, fomenting a conspiracy to use the troops under his command in a revolutionary movement against the present Government. He is alleged to have proposed to Gen. Espiridon Rodriquez, in command of the Neuvo Laredo sector of the border, to join him, the seizure of Laredo and its customhouse being one feature of the plan. Rodriquez pretended to be in sympathy with the movement but asked proofs of its probable success. Pruneda then arranged a conference in Laredo, Tex., between General Murguia, Rodriquez, and himself. Upon the return of the last two generals to the Mexican side, Rodriquez informed Gen. Joaquin Amaro, commanding the third military zone, of the facts. Pruneda was quietly arrested and brought to Mexico City, where, within a few hours of his arrival, he was placed before a hurriedly convened court-martial on the evening of February 13. The trial was completed early next morning and Pruneda was taken practically from the court room to the barrack yard of the Cuartel Santiago Tlaltelolco, where he was shot about 6.30 a. m., February 14, 1922. One of the charges against him alleged an exchange of telegrams between General Pruneda and his brother, Col. Joso L. Pruneda, in command of the garrison at Linares, Nuevo Leon, evidencing Colonel Pruneda's intention to revolt and General Pruneda's knowledge of that intention and advice to his brother to delay his action temporarily. The

court trying General Pruneda was composed of Brig. Gen. Alfredo Medrano (presiding), Frederico R. Berlanga, and Paulino Navarro.

Some weeks ago General Pruneda's name was involved in a rumor as to an incipient insurrection at Camargo, Tamaulipaz. The rumor was immediately denied by the War Department.

When on the afternoon of February 13 it became known for the first time to General Pruneda's family in Mexico City that the general was under arrest, a brother living here made desperate efforts to save his life. Amparo (injunction) proceedings to delay his trial were sought and obtained immediately in the Federal courts. This had evidently been foreseen by the War Department, which was determined not to have its summary proceedings stopped. Although one Federal judge personally tried to serve his writ to President Obregon, the Acting Secretary of War, and other high officials, proceedings were allowed to run their rapid course.

Gen. Antonio Ruiz was a subordinate in Chihuahua of Gen. Eugenio Martinez, chief of operations in the second zone, including that State. It appears that his implication in revolutionary activities there came to the knowledge of his superior and that his arrest was about to be effected. Learning this, General Ruiz, accompanied by one or more officers also involved, disappeared. A day or two later the general appeared at Francisco, Villa's ranch at Canutillo, and proposed to the ex-guerillero to join in a rebellion. Villa let him state the plans, then arrested him and Captain Peres (who accompanied Ruiz), and delivered them to the garrison commander at Hidalgo del Parral (Col. J. Feliz Lara), who in turn delivered them up to General Martinez at Chihuahua. A court-martial met in Chihuahua on February 13 and the two officers were shot the following morning.

The first news to the general public of these happenings was contained in the press of the morning of February 14, followed a few hours later by extras confirming the executions. Following immediately the reported declarations of the Secretary of War and other high officials to the effect "perfect peace reigned throughout the Republic," and that the only suggestions of rebellion was the exaggeration, by irresponsible or malicious persons, of the activities of few unimportant bandit groups, these events came as a severe shock to public confidence, already undermined by many rumors.

It is believed that the charges against the officers executed were well founded and, *the whole circumstances considered*, that their prompt execution was justified. Two facts, however, are of importance. First, the administration was sufficiently alarmed at the evidence of *disloyalty in the army itself* to insist upon immediate and severe examples being made of the culprits, regardless of the law;

second, it had so little confidence in its own civil courts that it did not dare risk the probability of the guilty men escaping punishment if the matter ever were allowed outside the control of the military courts.

As regards General Pruneda, at least, the execution was, if morally just, illegal under the constitution and laws that General Obregon has been so insistent should be enforced, whenever such action happened to be adverse to the interests of others than himself. Public sentiment, it is thought, in general approves the executions but is none the less alarmed at the conditions that the necessity for such action and for disregard of the orders of the Federal courts implies.

Rumors of disaffection elsewhere in the army are rife, and there is distinct apprehension of serious disturbances in the near future. This feeling is more pronounced than at any time since last October.

Colonel Pruneda secured "amparo" on his arrival here under arrest. The press to-day announces that he will be tried under ordinary procedure and that a number of his officers, who were brought here with him, have been released for want of evidence against them.

Villa's action in regard to General Ruiz may not be as clear as appears on the face of events. When Ruiz came to Canutillo Villa probably knew that Ruiz was practically a fugitive from justice and that his presence at Canutillo would ultimately become known to the Government. There is at least a possibility that Ruiz and Villa had been in communication previous to the discovery of Ruiz's defection, and that Villa turned on Ruiz to shield himself. In his last words Ruiz denounced Villa for his "disloyalty."

INTERVIEW WITH GENERAL SEMENOFF.

Source: Maj. R. L. Eichelberger, M. I. D.

3 April, 1922.

Ataman Semenoff was interviewed in his room at the New Willard Hotel. His interpreter was present and I was accompanied by Lieutenant Bryant, of the Navy Planning Board.

General Semenoff seemed very willing to talk about his actions in Siberia, particularly his connection with the Japanese. He was not as aggressive in his attitude as on those occasions when I met him in Siberia. He naturally assumed an honesty of purpose in his past actions in Siberia. For example, while admitting that he was hostile to Admiral Kolchak during a part of the life of the Kolchak Government, he denied that he had been paid by the Japanese to adopt this attitude. The most important points brought out by General Semenoff were the following:

(*a*) General Semenoff stated that on a number of occasions the Japanese prepared to have him declare himself supreme ruler of Eastern Siberia. He is now convinced that the Japanese wanted him to maintain a Japanese-controlled Government.

(*b*) After the fall of Admiral Kolchak, when General Semenoff prepared to evacuate from the Zabaikal Province, the Japanese promised him that they would give him free rein in the Maritime Province. When his soldiers surrendered their arms at Manchuria station, the Japanese took possession and never returned more than a small proportion. When the general arrived in Eastern Siberia he found that he was virtually a prisoner of the Japanese. The Japanese requested him to take refuge on one of the Japanese islands, but he finally received permission to go to Port Arthur, where he felt he might, at some time, be able to be of use to his country.

(*c*) In May, 1921, Semenoff stated that he furnished Merkuloff with certain sums of money with the idea that Merkuloff would be friendly to him. During the latter part of May the Japanese furnished him a boat in which to go from Port Arthur to Vladivostok. This boat was furnished by the Japanese without expense on the part of the general. It was his understanding that he was to assume command in Eastern Siberia. Upon arrival at Vladivostok, Merkuloff refused to turn over the reins of government. The consular corps also took a stand against Semenoff and practically delivered an ultimatum forbidding him to land. The British, French, and Polish consuls, however, came to him later and told him that they were merely making a request and not an ultimatum in view of the fact that they did not believe the people of Siberia wanted Semenoff to land. Merkuloff informed Semenoff that if he attempted to take over the Government that the provisional Government would lose the support of the Japanese. Semenoff informed Merkuloff that the Japanese had already fooled him three times and that they would soon double cross Merkuloff. General Semenoff then detailed at length his escape from the Japanese boat in Vladivostok Harbor and his arrival at Grodekovo.

(*d*) The Japanese wanted Semenoff to move into the Amur Province against the troops of the Far Eastern Republic in conjunction with the movement from Mongolia commanded by Ungern Sternberg. Later, however, the Japanese apparently decided that they were through with him, refused to allow any supplies to go to him, and left his army unarmed and unfed. They finally paid him 100,000 yen to leave Siberia. The general stated that he kept part of this money and used part of it paying off his troops. In detailing the amount of support which Merkuloff has received from the Japanese

he said that he received his information from his own officers serving on Merkuloff's staff and that the total support received by Merkuloff up to March 1 was approximately 5,000,000 yen.

(*e*) The Merkuloff advances against Habarovsk in December, 1921, was engineered by the Japanese for the purpose of having a club to wield over the head of the "Reds" at the Dairen conference. About the same time the Japanese agreed at Dairen to get rid of the Merkuloff troops, and through use of bandit bands and the withholding of support brought the Merkuloff offensive to a disastrous finish. The Japanese were, therefore, supporting both factions.

CONCESSIONS.

General Semenoff stated that the Japanese on many occasions attempted to get concessions from him. He stated, however, that he never actually signed any concessions. These concessions requested varied from mining and forestry concessions in the Zabaikal Province to three separate demands for him to sign over the entire maritime Province, including Vladivostok and Habarovsk, to the Japanese. When questioned concerning the final disposition of the two carloads of gold seized by Semenoff at Chita during the Kolchak retreat, the general stated that he had used a large part of it during the following year and a half for the support of his army, and about 9,000,000, he stated, were stolen by three Russian generals, who are now living in luxury in China. Gold to the value of about a million gold rubles was turned over to the Japanese to be exchanged for certain amount of currency. The Japanese still have the gold and the general has not yet received the currency. Thirty-six poods were given to General Kalmikoff and were turned over by General Kalmikoff to the Japanese when Kalmikoff was forced to flee into China. The Japanese still have this gold.

JAPANESE ACTIVITIES IN SIBERIA.

At one time the Japanese wanted to gain possession of Eastern Siberia from Baikal to the sea. *They now apparently will be content with the maritime Province, including the Valley of the Amur from Habarovsk to Nikolaevsk and the northern half of Saghalien and Kamchatka.* While it is possible that the Japanese may withdraw their troops temporarily, these troops would only be withdrawn to Korea and would be left ready to return at a moment's notice. In the meantime, the Japanese would keep the country stirred up, as they are now doing, by the use of Hunhutze bands. The general stated that the present number of these bandits, which are supported by the Japanese, is about 5,000. They are scattered through the entire maritime Province and their activities are di-

rected by Japanese officers. The general headquarters of the Hunhutzes is at Nicolz, in close proximity to the Japanese headquarters. These bands are used at present in keeping the country stirred up in order to furnish justification for the presence of Japanese troops and to terrify the inhabitants. This terror forces the peasant or merchant to sell his property at a very low rate to Japanese investors. Most of the valuable properties at Vladivostok, Habarovsk, and Blagovestchensk are now owned by the Japanese and the titles to these properties have usually been gained through some form of terrorism. The general compared the acquisition of Russian property in these States to the Japanese actions in Tsingtao. He also indicated the Japanese aims in Siberia by pointing out military construction in the vicinity of Nikolaevsk. A military road is now under construction from Nikolaevsk through Marinsk to Sofinsk. Military roads have already been completed from the towns of Marinsk and Sofinsk to De Castries Bay. Radio stations have been erected at Nikolaevsk and De Castries and stone barracks for a division are under construction at Nikolaevsk.

While the general denied that he personally had been paid by the Japanese to undermine Kolchak, he stated that the Japanese did everything possible to weaken the Kolchak régime while Kolchak seemed to be gaining strength. He stated that the Japanese carried their theory or policy of "Divide and rule" down to the smallest official.

PROPAGANDA.

In discussing Japanese propaganda and particularly anti-American propaganda in Siberia, the general pointed to the purchase of various Russian newspapers by the Japanese for the development of their interests. The general stated that the paper Sviet, published in Harbin, was originally started by himself for advancing his own interests. The Japanese, however, heavily subsidized the editor for the purpose of making violent attacks upon the Americans. This paper has now degenerated until it is nothing less than a Japanese paper. The general stated that the Vladivo Nippo, published in Russian, and the Vladivostok Daily News, published in English, both of which appear in Vladivostok, are nothing but Japanese propaganda sheets.

The general stated that all the Russians were glad that an American cruiser is stationed in Vladivostok. If there was no American boat there the Japanese arguments that the great nations have no interest in the Siberians would fall on even more fertile field than at present.

The general stated that during his long years of experience with the Japanese officers that he found that *they all look forward to the day when Japan will fight America.* He stated that *Japan is preparing to-day and will continue to prepare for a future war with the United States.*

Speaking of the Nikolaevsk massacre, General Semenoff stated that he believed the massacre was arranged by the Japanese. A Japanese colonel, who was in contact with Semenoff, told him that he considered that the loss of life at Nikolaevsk was very small in comparison with the ultimate gain for Japan.

In conclusion, the general stated that he was very anxious to see the Secretary of State and President Harding. He added that his visit to this country was an unofficial one and that he expected to take his wife to Europe in order to consult certain doctors. He stated, however, that he wanted to help his country and that he believed that the peasants of Siberia were awaiting the opportunity of overthrowing the Bolshevik régime. The general promised to furnish the names of various Bolshevik propagandists throughout Mongolia and China.

April 4, 1922.

Major Short and Major Eichelberger interviewed General Semenoff with reference to recent events in Siberia. The following are the most important additions to the information obtained at an interview on April 3.

In view of General Semenoff's statements that he had often heard Japanese officers discuss a coming war with the United States, the general was requested to state what he could remember of the general Japanese plan of action in case of war between the United States and Japan.

He stated that the Japanese were planning to obtain permanent possession of Northern Saghalien and the mainland of the maritime province so that the shores bordering the Japan Sea would be entirely under Japanese control. All entrances to the Japan Sea would then be fortified so that the entire Japan Sea would be impregnable to an American fleet, and it could be used by the Japanese in their operations against the American fleet.

The general pointed out on a map the manner in which the Japanese officers would indicate the fortified sea of Japan and the various outlying islands which are fortified. He stated that the Japanese officers felt that the American fleet would be operating so far away from its base that it would not be able to overcome the Japanese fleet. He stated that he had heard Japanese officers remark that the Philippine Islands could easily be captured by Japanese troops. The general stated that the Japanese officers had informed

him that Japanese troops would be stationed on Chinese territory in the event of war between the United States and Japan in order to insure a steady flow of raw material and foodstuffs to Japan. This action would be particularly necessary in view of the hostility which the Chinese feel for the Japanese.

The general emphasized the Japanese attitude in Siberia. He stated that for two years or more the Japanese have promised to withdraw from Siberia whenever a stable government is formed there. The general stated that it will be impossible to ever form a stable government as long as the Japanese are working so hard to prevent such a government being formed. The general stated that even though a stable government be formed in Russia it will be a long time before any Russian government can threaten Japanese control in Eastern Siberia. If America should, however, become engaged in war with Japan, the Russians would at once seize that opportunity of forming an alliance with the United States. While the Bolsheviki are a menace to Russia, the general stated that they constituted no such menace as do the Japanese in Siberia. The Bolsheviki may be overthrown or may change their type of government, but the Japanese policy will never change toward Siberia.

RUSSIA.

Source: A Letter from Lieut. Commander Hugo Koehler, American Legation, Warsaw.

23 February, 1922.

It has been said that there are exactly as many theories about Russia as there are experts on Russia, but I think this goodly number can be considerably reduced even by geographical classification; in fact, one can put one's fingers rather definitely on the Berlin theory, the Paris theory, the Washington theory, the London theory, the Warsaw theory, and so on. All these many theories may differ rather widely from each other, but it is extremely doubtful whether they do so as much as they do from the actual situation in Russia. It is the Washington atmosphere that gives its color to the Washington theory, and the Paris atmosphere that bends the facts to suit the curves of the French theory; in the same way as it is the policy of the English, the plans of the Germans, the hopes of the Poles, that color the London, Berlin, Warsaw theories. Nor do I doubt that I myself am influenced by the Polish point of view, although I have tried to neutralize the effect by getting information from as many sources as possible and from as many different angles. And my honest opinion is that as long as I am not in direct contact with Russia and Russians, and breathing Russian air, and living in the Russian dirt, and feeling

the currents and countercurrents that move the great masses of Russians, my opinion about things Russian is worthless. From which it would follow that if we want opinions or plans or a policy concerning Russia in which we can put all our conviction we must somehow arrange that I do get into real contact with Russia. Until then I feel that I should confine myself to the things that have crystallized in my mind with some definiteness, avoid high altitudes and thin air, and stick very, very close to the ground.

But be that as it may, and so forth, I venture forth again and plunge right in with the idea on which almost all attention seems to be concentrated at present: "The revolution is over, evolution has begun." It is a beautiful phrase and most seductive. One hears it and echoes of it from all sides, and not only because the idea is simple and one which almost anyone can understand but also because there is much truth in it, it has a great chance of becoming misleading. I believe that the revolution, as we use the term, is over, and that evolution has begun: but I also feel that this phrase is in itself very dangerous, for about 100 per cent of the people who repeat it read into it that the process of evolution will continue. But can it continue with the Red régime still in control? Can this movement keep on its course to the right? There are many apparent reasons for the affirmative answer, but are these reasons real? For example, Zinoviev's admission that Russia has now less than 10 per cent of her former wealth, and that one in every six persons in Russia is starving, and one in ten actually threatened with death, might well be considered to indicate that at last even the extreme wing of the Bolshevik party had realized that there was something pretty wrong with a system which produced such results. And Tchicherin's statement that it would be impossible to restore Russia without the help of the rest of the world might readily enough be interpreted as an indication of his realization that the principles of the rest of the world, no matter how imperfect, at least produce the things which Russia must have and can not produce under a Red régime. And Lenin's frank confession that "the spring of personal interest, e. g., the desire of the peasant to possess a greater surplus after paying his natural tax, acts more powerfully on production than the most persuasive speeches or most drastic decrees," might very well be taken as a still further indication that the Bolsheviks have at last come to their senses. Moreover, the fact that in many recent speeches of the more important leaders there is more justification of the soviet system than there is a justification of communism might likewise give one confidence in this trend to the right. But when we search these same speeches more closely and examine the recent decrees and their working out in practice, we find a hundred definite facts to the contrary for every statement that indicates a real trend to the right. To be

sure, this is not the first example in history of fanatics whom no failure could disillusion. And over and over again we hear every single commissar cry out that these concessions to capitalistic principles are simply temporary political expedients—that communism has not been abandoned but simply held in reserve during a "breathing spell."

A closer analysis also shows that this trend to the right is more apparent than real, since there are so many strings to every commercial transaction that government control enters into every corner and detail. Yet even this much of a movement to the right has strained communism, and there are many signs that this strain is just about all that it can bear. Considerable elasticity has been put into communism by accepting such anticommunistic principles and methods as have been found indispensable in a practical world. But even this elasticity can not endure a much greater strain. More would rupture it. There are no signs whatever of any political upheaval sufficiently strong to overthrow the present Bolshevik régime, and yet the fate of the Soviet Government is so inextricably bound up with communism that it is certain that if communism proves fundamentally unworkable this Government can not continue to exist. This requires no very subtle reasoning; it seems almost obvious that a system impossible for the life of a people can not be imposed on that people. In short, if communism is considered impracticable, then no twisting and turning, no such "evolution" of the Bolshevik régime, can reconstitute or reconstruct Russia under that régime.

"*World revolution.*"—Because of the lull in the activities of Bolshevik propaganda in foreign countries the belief has become general that the Bolsheviks have seen the impossibility of world revolution and have given up this part of their program. Yet the Third Internationale itself states that this is not the case, and explains rather plaintively that this inactivity is due to the shortage of funds necessary for such propaganda and to the realization that western countries are fertile fields for propaganda of this kind only during times of great suffering and discontent. And, surely, there could be no better authority on the subject than the Third Internationale! Nor does "world revolution" mean that only western nations are to be attacked. Up to the present moment neither China nor India has been appreciably affected by the rather crude and clumsy Bolshevik propaganda, but these great countries are of themselves fast approaching the condition when they will provide fertile fields for such propaganda. That the Bolsheviks understand this is not a supposition, but is very clearly indicated not only directly by their own statements but inferentially by the enormous increase of enrollments in the Chinese and Indian sections of the foreign-language schools and the number of Chinese and Indians enrolled in the propaganda sec-

tion. Yet even so, the "world revolution" idea could be brushed aside without wrecking the present régime, whereas communism and "dictatorship of the proletariat" could not.

"*Dictatorship of the proletariat.*"—It is repeatedly stated that this is simply a catch phrase used in the early days of the Bolshevik revolution on account of its ready appeal to the Petrograd and Moscow workmen, and that the phrase has persisted to this day in words only. But is this the case? I do not doubt that Trotsky, Krassin, and Rikoff understand very thoroughly that civilization as we know it can not exist under an actual dictatorship of the proletariat, but even these men use this phrase not as a mere handy phrase but as an idea, and make good use of it by taking advantage of its fanatical strength to ride roughshod over all who oppose them. The idea is not only useful, but they dare not renounce it, for to do so would mean the loss of all support that comes from the fanaticism which has been the mainstay of the Bolsheviks from the very beginning. These fanatics who make what Lenin calls a "small, light, organized, wieldy minority," not only still believe in communism and do not see its fundamental impossibility, but because of their fanaticism they can not see it. At best they see only that economic conditions resulting from the war, the machinations of the capitalists, the strangulation of the blockade, the necessity of time and training to replace the burgeois who formerly directed th economic life, and so forth, have combined to delay the immediate realization of the communistic program; but more strongly than ever do they feel the possibility of its realization later. And it must be conceded that their fanaticism has had many things to confirm it, in their minds at least, even if nothing else than the mere fact of their success over all opposing parties, their continuance in power so long, and the fact that their power is to-day apparently more secure from political overthrow than at any moment of its existence. Consequently, to abandon this "dictatorship of the proletariat" idea would be to abandon the most powerful single support of the present régime; from which it follows that this plank will remain in the platform no matter how much some of the leaders who see its impracticability may want to throw it over.

"*The ruination of Russia.*"—When people speak of this they usually think of the railroads, the factories, the mines, and other conditions of material, or at most that the pre-Bolshevik surplus has been so thoroughly ruined that reconstruction would take at least a generation. I do not think that the material ruination, even though fairly complete, amounts to such a very great deal, for, based on the estimate of engineers who have actually seen the works and know the conditions, even the mines, which suffered more than anything else, could be brought to a capacity greater than in 1914 within eight years

at most. But there has been a ruination in Russia more devastating than anything that has touched the factories or railroads or mines; it is the general ruination of character, and, in particular, the ruination of the psychology of the workingman. The evidences of this may be more subtle, but they are none the less definite and actual, this because of the Bolshevik principle that anyone is a bourgeois and worthy only of hatred who has done anything to improve the condition of himself or his family above the level of the great masses. It is the Bolshevik creed that those above this level are to be exterminated, though exceptions are made in the cases of people who are useful to the Red régime. That the process of extermination has slowed down is taken as an evidence that the revolution is over, and this is a fair inference, perhaps. But it is also true that the terror recurs at intervals, and there is also some truth in the statement that the process of extermination has had to slow simply because of lack of necessary victims, since so large a percentage of those above the level of the masses has been exterminated and those who remain lead a life almost identic with those of the lower level. Originally this hatred extended to those who wore starched collars or fresh linen, and even against education and religion. However, the hope of finding a panacea for all their economic ills by means of some wonderful invention has lifted the ban from technical education, although it is still as severe as ever concerning all other forms of education not along communistic lines. But the antireligious activity of the communists persists, interrupted only by periods of more intensive activity. It is this ruination of character and the psychology of the workingman that has led many to believe that the reconstruction of Russia is impossible without a preliminary complete leveling process—that only anarchy itself can do this sufficiently thoroughly, and that then the rebuilding must commence from the bottom up. It is certain that in Russia itself the belief is general that the Bolshevik régime can not resuscitate economic life. As one of Russia's greatest editors formerly well known for his Liberal views, who is still in Russia, and in the employ of the Bolsheviks, expressed himself (privately, of course):

> The Bolsheviks can rob, and kill, and murder; they can make a mockery of religion and the marriage ties; they can make the children the property of the State; they can make glorious promises and produce beautiful theories; they can even describe the most extravagant theories as practicable and workable and working inventions; but they can not produce food, and they can not produce clothes.

"*Insurgent activities.*"—There is an opinion that the activities of the insurgent bands and the inability of the Bolshevik Government successfully to cope with them clearly demonstrate the insecurity of the Bolshevik power. Every group of Russians outside of Russia

seizes on this point and expands and expounds it voluminously. It is always pointed out that such insurgent activities are increasing both in violence and in extent and now go on simultaneously in Carelia, the Ukraine, and the Caucasus, and are causing the Bolsheviks grave concern. The single facts themselves are true, but I do not consider that the inferences drawn from them are exact. A closer examination shows that such uprisings are so often repeated that they are practically continuous, and that they are of such wide extent as to indicate the very positive and general dissatisfaction with the Soviet régime not only on the part of the insurgents themselves, but on the part of the great masses of the people without whose tacit support and sympathy such uprising could not hold out a week. Yet there is no evidence whatever that such insurrections are organized struggles of any party for any definite principles or program or even purpose; and when one talks to the people who take part in them, and to the people whose tacit support makes them possible, one discovers that quite as much as they are evidences of discontent with the Bolshevik régime they are evidences of the general anarchistic tendencies which have developed during the chaos of the Red régime.

The absolute prohibition of freedom of speech and of the press and the activity of the Tcheka naturally make the development of political views on broad lines all but impossible, and, consequently, such repressions have contributed very directly to the general anarchistic tendency. At present parties other than the Communists can hardly be considered to exist, if in our definition of a political party we include the possession of definite principles, a program, and an organized effort to achieve such a program; a mere divergence of views of individuals, or a sporadic outburst in a speech, or perhaps in an occasional publication which is promptly and thoroughly suppressed does not constitute a party in the sense of an influence that would work for the political overthrow of the present régime. Abroad there is still much talk about the Social Revolutionary Party, which formerly had a large and fairly far-reaching organization in Russia and which still enjoys a considerable prestige in Washington and Paris—a prestige apparently based more on the fact that it is the only party that has any money left (practically all of it is derived from American sources) rather than because of any signs of vitality or inherent strength, and perhaps also because a number of Russian names well known to foreigners are still clinging to it. But any peasant will tell you that he prefers the Bolshevik régime and all the hopelessness it implies to the Social Revolutionary land program, and that the one thing he is sure of is that the peasants would never submit to any such land program. It has often been said, and with no little truth, that "the nearest thing to any great national political idea in Russia is that the Bolshevik Government

is a government of the Jews, by the Jews, and for the Jews; that if and when the Russians get rid of the Jews, they will automatically get rid of the Bolsheviks, and vice versa—an idea that shows some signs of developing into considerable force. If one takes the principal commissions and committees in Russia and lists their members, and then takes, say, 300 of the principal authorities on this list, one is not a little startled on discovering that not one in five of them are Russians, and even of those counted as Russians, many, like Lenin himself, whose Russianity is so often proclaimed to refute the assertions that the Red régime now in control is made up of non-Russian elements, have a strong strain of non-Russian blood. Lenin has a strong Kalmuk strain, and his wife is a Jewess. These foreigners who are in control now—these Letts, Armenians, Finns, Germans, Poles, and so forth, and about three times as many Jews as all the rest put together—will, of course, not hesitate to ride the horse to death in an attempt to win an impossible race. This has given rise to the idea so often expressed that there is no more Bolshevism in Russia, but only that there are some 200,000 Bolsheviks holding on hard to their jobs, which have so far outstripped their highest ambitions. As a matter of fact, there seems to be no great chance of their losing them for some time to come, for no matter what else one may say of their utter unscrupulousness, they represent the keenest minds in Russia to-day and about 90 per cent of all the energy.

These peasants who will have none of communism and who hate the Jews must in the last analysis control the destiny of Russia, not only because of their mass, but because in an agricultural country, such as Russia must remain for generations to come, the man who produces from the soil must rule. The peasants are almost invariably described even by the Russians, as ignorant and stupid beyond words, but I know of no more inaccurate generalization. Ignorant they are, to be sure, for they are uneducated; but stupid they are distinctly not. Docile, too, and long suffering, and to date they have as yet shown no capacity for revolt on their own account. Politically, the best they have been able to do has been to follow demagogues, it seems. But they are docile only in the sense that the man who is bound hand and foot is docile, for the bonds of ignorance bind even more tightly than rope or leather. So at present the only real power the peasants have is that of the veto, but they have that very definitely, for in the long run they can and will put a dead stop to any program or any measures with which they are fundamentally not in accord.

THE FAMINE.

The facts of the case concerning the famine are now thoroughly established, and it is known that the drought, though contributing

to the local famine, played only a small part in the widespread starvation. Russia has always had local famines but even at their worst these famine years in the past did not prevent Russia from exporting large quantities of grain, and it is now clearly established that the real cause of the general starvation is simply that grass won't grow in a communistic atmosphere. The second fact is that such famines will become chronic; the locality of the intensest famine will shift, but the general starvation will continue. Many have called the famine a blessing (even though a blessing very thoroughly disguised) on the ground that only the intensest suffering when hunger became general, would furnish the spark that would fire the revolution. The revolution, but for what, toward what?

The usual answer, of course, is "liberty," but even such a subtle thing as liberty requires a very severe political program, and not only is no such program in sight, but even the idea or the germ of one is hidden. I note, however, that those who consider the famine a blessing are invariably not suffering from lack of food themselves. Still there are many who consider it a mistake to send food to Russia on the ground that such relief will only prolong the agony and by so much postpone the date of the real beginning of the reconstitution and reconstruction. And it is true that such famine relief does directly help the Red authorities, who, far from feeling any gratitude for this assistance, are laughing at the way they have outwitted their capitalistic enemies who come bearing gifts.

Reports from direct A. R. A. sources indicate that the A. R. A. authorities now in Russia have been no match for their Red collaborators, for the latter have maneuvered them into the position of actually begging and imploring the Bolsheviks for permission to feed them. This seems quite incomprehensible until one learns of the personal loyalty to Mr. Hoover of these men of the A. R. A. who feel that unless they actually feed the million Mr. Hoover announced he would feed, it would be a great blow to the latter's prestige, and consequently a calamity to be avoided at all costs. The Bolsheviks were quick to discover this, and, of course, they could have no more perfect weapon, so small wonder that they call Eiduk, the Bolshevik representative, the chief of the A. R. A. in Russia.

But there is a point beyond all this. It may very well be that American relief helps the Bolsheviks, and they are not grateful, but in reality such help and such lack of gratitude has nothing to do with whether or not relief is justified or advisable. But the point is that the Bolsheviks will not stand or fall because of any such relief we may give them, and, moreover, whatever the attitude of the Bolshevik leaders may be the Russian people, those who receive food when they are starving, will not readily forget. And for the moment quite leaving out of consideration the question of mere humanity

and charity, the cost and the effort of this relief work is paid for many times by just the good will that this practical sign of friendship in need is creating between the two great races destined for ever closer relations in the future. In this connection is it well to remember that Russian interests have never conflicted with our own and do not now, nor are there any conceivable circumstances which could cause them to conflict. And this, incidentally, is more than can be said of any other great power in the entire world; and therein lies no small significance. For one of these fine days we are going to have to fight for the position that is now ours simply because we produce a lot of grain at a time when the world is hungry. And when that day comes when we shall have to fight for our own, it will be a mighty fine thing to have a great country whose interests do not conflict with ours and who could help us if they would have a real good will toward us.

And Russia has a future ahead of her, even though that future is some distance in the future; it is even possible to fix the date for the dawn of that new era. First there must be a period of education—an education that will teach these Russians first to discipline their minds to systematic working, an education that will teach them to think logically and to trace relations between cause and effect, not simply to speculate interestingly and dream fantastically. It has long been held to be a safe generalization that no Russian disciplines his mind. It follows, then, that his actions are without discipline, without logic. What is less remarkable than that Russia should be without discipline, without logic, without order? But in spite of the eclipse of the moment, Russia's future is still ahead of her, and it is a great future. For Russia is young, has enormous potential strength, has great originality and creative talent, and Russia is learning and making her own way toward freedom. Since it is the fashion now to fix the date of the fall of the Bolshevistic régime, I, too, will hazard a guess, it will simply be that day on which the Bolsheviks can no longer feed Moscow and Petrograd.

This increase in American prestige in Russia and the Russian good will toward America all our European friends are apparently very anxious to capitalize. In London one hears that the only sound way to reconstruct Russia would be by means of American capital working through the British agencies long established in Russia. In Berlin there is a great cry that Germany has the organization, that Germany knows Russia as no other country knows her, that Germany through years of experience has the intimate knowledge of the Russian market and Russian conditions and Russian psychology that no other country has, and therefore the only way to reconstruct Russia will be by means of American capital and German organization and agents.

In Paris one hears that obviously the only way to reconstruct Russia will be for American capital to cooperate with French interests, otherwise Germany will get control of Russia, and then the world will be lost. In Warsaw one hears that only the Poles, because of their understanding of the Slav nature: their knowledge of the language, their close relations in the past, their strategic position, etc., can effectively reconstruct Russia; but, of course, American capital is required to cooperate with the Poles. And the simple truth of the matter is that although the use of the American credit resources might be a very pleasant thing for the British, French, Germans, and Poles, such use would be of precious little service to either Russia or America. For once some other agency has captured the Russian market by means of the use of our credit, and has consequently established itself, we can be told to go to the devil. And small alternative would there be for us.

Nor would I blame these foreign agents in the slightest for turning over the business to their own nationals. We have had considerable experience of late with foreign agents, and none of them have been happy. We have had British agents abroad for the ships of the United States Shipping Board, and I have seen United States vessels leave port having paid a high price for ballast, while on the same and successive dates British vessels with the same agents went full of cargo. I do not think it is fair to blame the Shipping Board for this, because there was a tremendous job to be done and little time and less experience to do it. I do not blame the British agents, for obviously their agencies for the Shipping Board were but temporary affairs, and their future depended not on sending out our ships with full cargoes, but on getting full cargoes for their own ships.

The fact remains, however, that if we want cargoes for our ships, *we need American agents for American ships;* and in exactly the same way, if we want real trade with Russia we must have American agents for this American trade. And as for the Genoa conference, the first effort of our fellow conferees would undoubtedly be to involve us in a discussion of world economic conditions which would have for its object nothing less than we forget this cardinal principle of American agents and American credits for American trade; and the second aim of the conference would be for these powers to tar us with the brush of their Russian policies—these powers who from first to last have made a terrible hash of their relations with Russia, who have missed wide on every guess and lost out on every plan and scheme simply because guesses, plans, and schemes were all founded not on a decent regard for the interests of the Russians but were designed only and entirely for the powers concerned, or in some cases only for the temporary benefit of the party in power there at the moment. Whatever may be the general shortcomings of our foreign pol-

icies, or lack of them, it is certain that the United States, alone of all the great powers, has a sound and consistent policy toward Russia, a policy that has earned the respect of all parties in Russia, even though it has not agreed with the ends of any of the extremists, either radical or conservative. Even the Bolsheviks respect this policy, though it does not meet their wishes: never once has Tchicherin flayed us as he does Lord Curzon and the Quai d'Orsay quite regularly, though he never gets more than a whimper from the latter. And we are to enter this conference, have our pockets picked, and then indorse a policy compounded of nothing more vital than past mistakes and a scramble to make up for them while the other fellow is still down. What rot! And if we do not join the gang, we will be called names; will be told that we are selfish, provincial, etc., with no thought for the rest of the world. But being called selfish by those who would use us for their own advantage does not necessarily make us so. Surely, it is not selfish to have a decent regard for the interests of the real Russia, even if that Russia is flat on her back now. Nor is it selfish to seek foreign trade; and certainly, if we are going to go in for foreign trade, it is not necessary to tie our hands behind our back and have our rivals lead us by the nose. I repeat that this is difficult to see how there can be anything unfair or unjust in using American credits and American agents for American trade. So I ask, what good can come of the Genoa conference. And every night when I say my prayers I add a very fervent one that God grant us the good sense to stay away. Of course, I do not comment on the irony of all Europe rushing to Genoa to reconstruct Russia, for it is almost painfully obvious that the purpose of the Genoa proceedings is to try to get Russia to save Europe.

I am having a busy time chasing down information with regard to some of the widely heralded Bolshevik inventions, particularly in regard to radio development in Russia. There is no doubt at all that the Russians have a distinct talent for original work and invention in electricity, and the Red Government has been giving considerable support to all sorts of inventors, mad and otherwise, in the hope of finding a cure for all the economic ills of Russia by means of some invention which would upset the natural and economic laws which tie down the rest of us. But when one examines in detail these often very positive statements about what has been accomplished, one finds that these statements are nothing but propaganda pure and simple. When I asked the Ukrainian representative here for information concerning the Ukrainian electric engineer named Chayko, who is reported to have discovered a method by means of which wireless messages can be sent to a definite receiving station without danger of being picked up by other stations, and who is

stated to be continuing his experiments for the scientific technical department of the Ukrainian Government, I was told that the information desired would be furnished shortly. However, no such information has been forthcoming, and one of the members of the Ukrainian delegation here, whom I know quite well, told me privately that the answer had been that this man, Chayko, had stated that he could perform these wonders, and had asked for funds with which to carry on experiments, but that he had as yet obtained no definite results. The same member of the Ukrainian delegation said that as for the "Scientific technical department of the Ukrainian Government," there was no such thing. However, I have sent a courier to Kharkof, where this man, Chayko, is now at work, and expect to get some more definite information before long. There is no doubt that most of these announcements, such as that about the famous electric train that made one trip from Petrograd to Moscow and never moved again, and all the electrical plows, etc., are about 99 per cent bunk, and useful for propaganda purposes only. However, I am equally certain that useful things will come out of Russia, particularly in the electrical field, so I am trying to keep on the job accordingly, and I'll forward such things on to you as soon as I can get any information that would be at all useful, even if it may not be as complete as I should like to send to you.

AIR LINE BETWEEN SPAIN AND ARGENTINA.

27 March, 1922.

According to numerous articles in the press, plans are now being made for the establishment of a commercial line of airships between Sevilla and Buenos Aires and for the construction in Sevilla of a German factory for the manufacture of Zeppelins, destined for this trans-Atlantic service.

Concerning this undertaking, which is the result of the initiative of Comandante Herrera, technical director of Spanish aviation, the Journal des Debats, of Paris, states:

Buenos Aires has been selected as one of the terminals on account of its importance as an economic center and of its great distance, for the interest in an aerial line increases with its length. As for the other terminal, Sevilla has a climate especially favorable; very seldom is there any rain or fog, and the winds from the north and northwest are unknown, thanks to a natural barrier of 800 to 1,000 meters average height formed by the Sierra Morena and the Sierra de Aracena Mountains, which lie in a semicircle 50 kilometers from Sevilla. The aviation field is near the city and, like that of Buenos Aires, it covers almost 125 hectares (about 300 acres) and can accommodate two hangars, one of them revolving. Each of these installations will cost approximately 25,000,000 pesetas.

After preliminary studies of the project, a Spanish-German mission has just made a trip to South America to fix definitely the bases for the enterprise. The mission was composed of Comandante D. Emilio Herrera, technical director of Spanish aviation, who is well known in France, since he served his apprenticeship as an aviator at Paris. He took with him two well-known German pilots, Hugo Eckener and Eberhardt Lemperts; the manager, D. Tomás Rementeria, and the general secretary, Mario Berrintira. These gentlemen were very well received in Buenos Aires. They brought to the President of the Republic a special message from King Alfonso XIII, praising the new method of transportation which would bring the two countries close together.

The project will be handled in the beginning by German experts, but at the end of four years they can be replaced by Argentines and Spaniards, who will be instructed at a dirigible school, with flights between Sevilla and the Canaries.

The airships proposed for the intercontinental flights will be of a cubic capacity of about 200,000 meters. They will be 300 meters in length, with 15 motors of 250 horsepower, or a motive force of 3,750 horsepower, which will insure a speed of 140 or 150 kilometers per hour. The crew will consist of 40 men—officers, pilots, mechanics, and stewards. The dirigibles will carry 60 passengers in a compartment situated in the forward part, and have about the same appearance as the latest models of airships, but divided horizontally in two decks, containing the restaurant, kitchen, staterooms, etc. The trip will cost about 8,000 pesetas ($1,600 normal exchange) for each person. The trip will be made in at most four days, that is, for the return trip to Europe, as the prevailing winds are more favorable for the outward journey. At present it requires 21 days to go from Bordeaux to Buenos Aires. This saving in time will be of great benefit.

In London Comandante Herrera made the following statement regarding the enterprise:

All of the dirigibles for this service will be built in Spain, under the direction of engineers from the German Zeppelin factory.

The necessary locations have been selected in the vicinity of Sevilla and Buenos Aires, and in the month of March the preliminary work will begin.

In Sevilla will be constructed two large airships, one of them of smaller dimensions, intended for service between Spain and the Canaries.

The large dirigibles will be equipped with nine motors of 400 horsepower each. The cabins will be located near the bow and will contain a compartment for the pilot, a cabin for the commanding officer, saloon, living quarters, kitchen, and smoking room.

Each Zeppelin will be able to carry 40 passengers. The trip, going and returning, will take one week, and the price will be 10,000 pesetas ($2,000 normally).

These dirigibles will also be able to carry freight.

Recently a lecture was given in Madrid by Comandante Herrera on this subject. I am unable to ascertain how the necessary capital will be obtained, and am of the opinion that all of this publicity is for the purpose of getting financial backing for the enterprise. I do not believe that these efforts will be successful, and that the project, for the present at least, will make much progress. It is estimated that four years will be required to construct the plant at Sevilla.

SPANISH EXPEDITION AGAINST MOORS.

23 March, 1922.

Extensive plans are now under way for contemplated landing operations at the Bay of Alhucemas, in which the Spanish Navy will play an important part, in cooperation with the army.

The Bay of Alhucemas is an open roadstead, situated on the Mediterranean coast of Morocco, about 50 miles to the westward of Melilla, in the country known as the "Riff," which lies between the occupied zones of Melilla and Ceuta. It is wild and desolate and very mountainous country, the stronghold of Ab-del-Krim, the leader of the rebellious Moors. A small island, El Peñon de Alhucemas, is situated in the bay, about a quarter of a mile from the shore. It has been occupied for many years by the Spanish forces and is well fortified and garrisoned. A newspaper photograph of this island is attached. The Moors have fortified the hills surrounding the Bay of Alhucemas with numerous 75-millimeter fieldpieces captured from the Spanish in the disaster of last July.

The preparations for the landing operations, which are scheduled to take place in May or June, have been much advertised in the press for the last two months; so much so that I am inclined to believe that they may never take place. The exact object of this extensive undertaking is not quite clear. If the Spaniards attack in sufficient force it is probable that the enemy will evacuate their positions and take to the mountains, where pursuit will be almost impossible, and nothing will be accomplished other than the moral effect of landing an army in the stronghold of the enemy. On the other hand, the operations are likely to meet with serious difficulties. The Bay of Alhucemas is an open roadstead, with no protection from the prevailing storms, and if bad weather should be encountered the landing of the army will be very hazardous.

At present most of the vessels of the navy are at the dockyards, overhauling and fitting out for the expedition, and it is reported that a large number of barges are being constructed for landing the troops. It is planned to use all of the vessels of the navy to cover the landing with their guns. Plans were also being made for the use of hydroplanes, but these, I understand, have been abandoned, owing to the difficulty of using aircraft with no protection from the weather.

It was reported a few days ago that the Moors were withdrawing their artillery from the positions in the hills surrounding the bay, but this was evidently not the case, for on Saturday, March 18, the enemy unexpectedly opened fire on El Peñon de Alhucemas and on a merchant vessel, the *Juan de Juanes*, which was unloading stores and munitions for the garrison of the island.

The following account of this incident appeared in the press:

At 8 in the morning of Saturday the Moors opened artillery fire on Alhucemas. Our batteries repelled the attack, discharging a heavy fire against the coast. In the first moments one of the enemy shells landed in the engine room of the mail steamer *Juan de Juanes*, which was anchored in the bay. Another projectile destroyed the rudder, and the vessel soon settled to starboard and sank. The crew, in boats and by swimming, succeeded in reaching the island of Alhucemas in safety. Of the *Juan de Juanes* nothing is seen on the surface of the water except the bridge and the bow, all the cargo being lost except that which had already been landed in three boats. In the fortifications the first projectiles landed in the telegraph office, which had to be abandoned and the instruments moved to a place of safety. The inhabitants of Alhucemas acted with great coolness. By midday the batteries silenced the fire of the enemy.

Yesterday the attack was repeated without any results. The battleship *España* has arrived at Alhucemas. The batteries of Alhucemas are greatly superior to those of the enemy, and they caused enormous destruction in the rebel camp.

The only ships of the navy in Moroccan waters, the three gunboats *Laya*, *Lauria*, and *Molina*, and the cruiser *Reina Regenta*, have proceeded to Alhucemas, as well as the battleship *España*, mentioned in the above dispatch. They have bombarded the enemy positions on the coast.

Considerable anxiety is felt over this incident on account of the effect it may have on the fate of about 600 Spanish prisoners now held by Ab-del-Krim. Ever since last August it has been feared that these prisoners might be massacred by the Moors and strenuous efforts have been made to obtain their release by ransom. Negotiations which had almost been completed were abandoned a short time ago by Ab-del-Krim.

SPANISH AVIATION.

16 March, 1922.

A recent royal decree authorized the Minister of Marine to purchase at his discretion, without the usual competitive bidding, such aviation supplies as are necessary for operations in Morocco.

In response to an inquiry instituted by the American consul, the Ministry of Marine stated that no information would be given as to what kind of supplies would be bought, but that offers could be submitted for consideration.

It is believed that the material will be bought in Germany.

The construction of a hydroaviation base in Mar Chica, about 10 miles south of Melilla, is now under way, from which hydroplanes will operate in conjunction with the army in Morocco.

SPANISH TORPEDO PLANE.

21 March, 1922.

Information has reached this office from a trustworthy source that the Spanish Government has bought three torpedo-carrying planes from the Blackburn Aircraft Co., of Olympia, Leeds. This plane is known as the Blackburn "Swift" and is similar to the two purchased by the Navy Department.

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 6—1922.

15 JUNE, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1922.

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 6—1922—15 JUNE, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

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ARGENTINE, BRAZILIAN, AND CHILEAN NAVIES.

20 April, 1922.

Argentine.

Discipline in the Argentine Navy is uniformly good. Great attention is paid to the outward appearance of discipline, such as salutes, appearances on liberty, etc. The line of the navy consists of Naval Academy graduates, with a relatively small proportion of mustangs who entered prior to the permanent establishment of the Naval Academy. The latter is now the sole source of entry for officers. The Argentine naval officer is active, hard working, intelligent, and well informed; they administer and navigate ships well and maintain a well-disciplined, proud, and contented organization.

So far as proficiency in tactics is concerned, the Argentine officer has had practically no experience except in ships acting singly. Promotion is made by selection, which method, though formerly carried out with fairness and satisfaction to some extent, has recently been "hard hit" by political interference.

The "morale" is apparently very good—except in so far as affected by political interference—in connection with promotion and assignments. The enlisted morale is excellent.

Argentine has enjoyed peace for many years and apparently has no distinct popular feeling of resentment against any country. There is but little interest evinced in increasing the navy or in possible employment of the naval force. Naval ambitions appear to be confined to naval officers, who, realizing that larger appropriations can not be obtained from Congress, express the hope of seeing the navy a fighting unit, small but well rounded and sufficient to preserve the "esprit" of the naval forces.

Careful consideration has been given to the subject of wars with Chile and with Brazil; in general, their plans call for an immediate attack on the enemy. Blockade or semiblockade is argued as meaning obliteration of revenue from Argentine crops and herds, deprivation of coal and iron; hence the loss of the war. Defensive plans seem to have been relegated to minor importance. However, the presence of submarines in the Chilean Navy has thrown the offensive plan against Chile into confusion, and officers have stated that the Argentine fleet in event of war with Chile should remain at Puerto Militar and trust to powerful neutrals like England and the United States to make Chile lenient in blockading their ports.

Under date of June 30, 1921, our naval attaché in Argentina reports the following points of friction, that Argentine officers claim might become acute:

1. Discontent on settlement of Chilean boundary, whereby Chile was awarded such portions of Tierra del Fuego and Patagonia as to give her all of the Magellan Straits with outlets on the Atlantic. (This discontent is not general, it long since having been forgotten.)

2. Contempt for Brazil and intolerance and lack of consideration of the Argentine people for any policy or action taken by Brazil.

3. Extensive oil fields along the Bolivia-Argentina-Paraguay border line and possible friction from their development.

A South American war seems a remote possibility so far as a real cause is concerned. However, any insult, real or fancied, to their country would be sufficient to turn the patriotic Argentine nation into a hornets' nest.

Under date of December 22, 1921, our naval attaché in Brazil reported that he had received from official sources (under pledge of secrecy) information that Argentina had obtained four new cruising types of submarines fabricated in Germany shipped to Argentina in parts and erected in Argentina by German personnel. This report, which caused some flurry in Brazilian naval circles, has not been actually confirmed, although there has been some proof of negotiations of Argentina in this regard.

The strength of the Argentine Navy—personnel—is as follows:

Regular or active force.

Officers	779
Petty officers	2,395
Enlisted	8,430
Total	11,604

The reserve, composed of exconscripts of the navy and graduates of the Pilots' School (administered by navy for training merchant officers), is approximately double the size of the active force.

Brazil.

Our attaché in Brazil reports under date of December 10, 1921, that discipline in the Brazilian Navy "seems to be fairly good;" there is apparently no rigidity of discipline, but orders given are cheerfully and promptly obeyed.

The Brazilian Navy has not had a good record for discipline in the past. A serious mutiny occurred in 1910; many officers were killed. In 1919 there were mutterings of an outbreak, which, however, did not occur.

Conditions are growing better right along, due primarily to increased interest on the part of the Government in naval affairs, fos-

tered by the press of the country, which constantly calls for an armament worthy of Brazil's importance. In 1906 Brazil adopted a building program which was very ambitious for a South American country. This was largely completed, except for the third battleship, sold to Turkey prior to the outbreak of the World War. Since that nothing has been done toward adding to the navy, due to chronic lack of funds in the treasury. The general staff, however, in the latter part of 1921 presented an elaborate scheme to the minister, who in turn submitted it to the President. The details are not known, but it included every type of air, surface, and submarine weapon, and was designed to render Brazil the equal of any combination of South American powers. The chances of adoption of this program are small indeed.

Brazil makes no secret of the fact that she regards Argentina as her most probable enemy. The two countries do not compete seriously in an economic sense, but each is jealous of the political leadership in South America assumed by the other. War plans are based on Argentina as an enemy, with a probable alliance between Argentina and Chile—at least a strong friendly attitude between the two in the matter of furnishing supplies.

The point favored as a site for advanced fleet base in war time is the northern entrance to Santa Catherine Straits. Both ends of the straits would be heavily mined; the port of Rio Grande do Sul would be depended on only for submarines and aviation base. The navy has so few ships that it can not establish any policy as to strategic use of types, but would have to use its whole strength to the best advantages permitted by circumstances.

The United States has a naval commission in Brazil, whose recent reports concerning the training of personnel—target practice and general interest in the naval establishment—bears out the assumption that Brazil is endeavoring to place its navy on a proper footing.

An executive decree published February 1 fixed the Brazilian naval force (personnel for the year 1922) as follows: 1,069 commissioned officers; 100 cadets in the naval academy, distributed between the two courses, navigation and mechanics, as vacancies may exist; 5,000 sailors; 1,500 firemen under enlistment; 1,000 firemen under contract; 300 students, Escola de Grimetes (school for training of recruits in special trades—cooks, bakers, etc.); 1,000 students in schools for apprentice seamen; 6 first-class clerks; 12 second-class clerks; 12 first-class nurses; 28 second-class nurses; 150 apprentice seamen; also 800 enlisted men, Marine Corps, and the following soldiers for land duty, guarding navy's military prison on Ihla das Cobras, 45 privates, 3 corporals, 1 sergeant.

Length of service: Nine years for men trained in school for apprentices; three years, volunteers and men received through the

draft. (The draft in Brazil is administered by the army, but the Minister of Marine may call for such recruits as he may require to fill vacancies in the navy.)

Pay and bonus for enlisted men: Sailors and marines who serve three years with good conduct are entitled to a bonus equal to one-half of the base pay received. Upon reenlistment for three years more, their pay shall be increased by 50 per cent without bonus. Upon second reenlistment they shall receive double pay, also without bonus. Sailors and marines upon reenlistment may commute the clothing allowance granted recruits.

Reserves: There being no provision for the organization and training of reserves, the provision regarding them has little value and means little. However, the potential reserve for the navy is as follows:

First, all officers and men discharged from the navy who are under 50 years of age and not invalids; second, officers, sailors, and civilians of the merchant marine, arsenals, and factories of marine supplies, both governmental and private, civil employees of the navy and naval bases, individuals cultivating nautical sports approved by the Minister of Marine, under 50 years of age and not invalids; third, all individuals who have been included in the first and second reserves and are physically fit for service, regardless of age.

In general, reports speak well of the patriotism, loyalty, and interest of the average Brazilian naval officer in his profession, but indicate that the type of enlisted man is considerably below that of Argentina and Chile, although being continually improved through training.

The following report from our attaché in Brazil, who states source as reliable, under date of December 8, 1921, on "Brazilian naval activity," is quoted in full, because of its interest in connection with the foregoing:

> During the past month there has been more activity in naval matters apparently than at any time previously for about two years.
>
> The coast-defense ship *Floriano*, recently recommissioned after repairs, proceeded to Santos, spending several days at sea, holding drills and exercises. The two battleships have proceeded to Ilha Grande to spend three weeks in drills, torpedo-defense practice, and preparation for great-gun practice, which is to be held in January or February.
>
> The Minister of Marine has asked the government of the State of Sao Paulo to concede a site in Santos for a naval aviation station and that government has announced its willingness to do so.
>
> The plans for a new naval building program and extensive aviation program have recently been reported. Confidential information has been received that the Navy has been assured that it will receive an appropriation of 100,000 contos (thirteen and one-third million dollars) from the present Congress for shipbuilding. Sir Alfred F. Yarrow, the head of the Yarrow firm, of England,

and other British representatives, have come here for conferences, and it appears probable that some active measures will be taken. The idea prevails that probably 3 light cruisers, 10 destroyers, and a modest number of mine sweepers will be ordered. It is believed that the cruisers will be placed in England, destroyers possibly in the United States, and mine sweepers in France.

Plans for the building of the dry dock on Cobras Island are being rushed, and bids will soon again be called for.

The press is crediting the recently appointed minister, Veiga Miranda, with the cause of all activity. He is very energetic, and announced when he took office that he intended to instill new life into the service.

Chile.

The Chilean Navy, though never a large one, has always been an efficient one. It dates from the war of independence, about 1810, and from that time down to the present time the achievements, esprit de corps, and discipline of the officers and men of the Chilean Navy deserve a high standing among the maritime nations of the world. Chile owes her security and present position in South America to the uniform success of her navy in war, and the people of that country appreciate thoroughly the importance and necessity of their navy.

The officers and men compare favorably with those of any other navy. In training methods, intelligence, discipline, and uniforms they closely resemble the British, whose naval standards the Chileans always have endeavored to attain. The traditions of the Chilean Navy are closely woven with the exploits of British seamen who have fought for Chile in her navy. British naval officers have for years been instructors in the Chilean Navy, and Chilean naval officers have had and are receiving instruction on board battleships of the British Navy.

The officers are energetic, cultivated men keenly interested in their profession and thoroughly in touch with its latest developments. The men are a hardy lot of natural sailors, thoroughly inured to the life on board ship. Most of them are recruited from the boatmen and fishermen of the southern islands. They quickly adapt themselves to naval discipline and are a fine-looking body of men, in stature greatly resembling the Japanese. While they are not naturally as intelligent or well educated as our own men, they quickly develop into excellent man-of-war's men in the various service schools, and seem to have no difficulty in handling the guns and engines in an efficient manner. The discipline is excellent.

The officers are well prepared and competent. The enlisted personnel is intelligent, resourceful, and adaptable. The naval history is one that Chile is proud of, and every possible effort is made to foster the spirit of the navy and maintain it at the highest state of efficiency.

Under date of November 22, 1921, our naval attaché in Chile reports as follows:

Owing to the impoverished condition of the treasury of Chile, there are no plans for increasing the navy. The navy is getting along the best it can with reduced appropriations and is economizing in every way possible. The appropriations for the present year were $45,052,161.73 paper pesos and $20,827,-274.42 gold pesos. The appropriations proposed but not yet passed by the Congress for the next fiscal year amounted to $39,647,014.98 paper pesos and $5,838,753.20 gold pesos. The personnel of the navy authorized by law for the present year shall not exceed 689 officers, 6,058 men, 1,000 conscripts, and 636 coast artillery.

There is no building program, and there is no intention at the present time of acquiring more ships. There are no particular naval preparations underway. The active fleet at the present time consists of one battleship, three cruisers, five destroyers, and four submarines, with one cruiser and two tugs engaged in hydrographic work.

The aviation branch of the navy is very small. There are six student officers, and there are five hydroplanes and one flying boat in working order. The aviation branch, although promised funds, has not received them and is not progressing much, because aside from the six planes it has no other proper appliances, such as hangars, shops, etc.

The strength of the Chilean Navy (personnel) is as follows:

Officers	689
Enlisted	6,694
Conscripts	1,000
Total	8,383
Marines	None.

A comparison of the present naval strength of Argentine, Brazil, and Chile shows Argentine in the lead, Chile a close second, with Brazil a poor third, but in the last-named country there is ample evidence of a desire to reverse this state of affairs, which doubtless will eventually lead to increased naval activity and competition between the three South American Republics.

REORGANIZATION OF ARGENTINE FLEET.

1 March, 1922.

1. The sea fleet has been abolished as an organization and reorganized into three divisions, each depending upon its own naval district and the yards therein. This latter feature is not yet entirely possible for there does not exist the proposed naval station at Deseado, and the second division will base on Puerto Militar until the station be established.

2. *First division*, Rear Admiral Julian Irizar commanding. Based on Puerto Militar. The destroyers will base on Arsenal del Rio de la Plata on account of better fresh-water facilities there. The transports, in time of peace, will continue under the operation of the

bureau of administration of the Ministry of Marine. Rear Admiral Victor E. Montes, commandant of the first naval district. Battleships, *Moreno*, *Rivadavia;* cruiser *Buenos Aires* (now out of commission and under repair at Buenos Aires) ; destroyers, *Jujuy*, *Catamarca*, *Cordoba*, *La Plata;* transports, *Bahia Blanca*, *Pampa*.

3. *Second division*. Capt. Ismael F. Galindez commanding. Cruisers will base on Puerto Militar until the Puerto Deseado station is established. The destroyers will base on Arsenal del Rio de la Plata on account of better fresh-water facilities there. The commandant of the first naval district will also administer the second naval district. Transports in time of peace continue under bureau of administration. Armored cruisers, *San Martin*, *Belgrano*, *Pueyrredon*, *Garibaldi*, *Nueve de Julio;* destroyers, *Entre Rios*, *Corrientes*, *Misiones;* transports, *Chaco*, *Guardia Nacional*, *Rio Negro*.

4. *Third division*. Capt. Ricardo Harmelo commanding. Based on Arsenal del Rio de la Plata. Rear Admiral Juan A. Martin, commandant of the third naval district. Transports in time of peace continue under the bureau of administration. Gunboats, *Libertad*, *Independencia*, *Parana*, *Rosario*, *Patria;* torpedo boats, *Comodoro Py*, *Murature;* transports, *Patagonia*, *Primero de Mayo*, *Vicente Fidel Lopez*.

5. *Naval station at Corrientes* (not yet established). Under the commandant of the third naval district. Monitor, *Los Andes;* auxiliaries, *Sayhueque*, *Teuco*, *Namuncura*.

Naval station at Concepcion del Uruguay (not yet established). Under the commandant of the third naval district. Monitor, *El Plata;* torpedo boats, *Jorje*, *Thorn;* auxiliary, *Inacayal*.

6. The tugs *Ona*, *Querandí*, *Fueguino*, *Tehuelche*, *Azopardo*, and the sloops *Gaviota* and *Golondrina* are placed under the first naval district, basing at Puerto Militar.

7. The reorganization abolishes the present sea fleet, the destroyer flotilla, and the school division.

BRAZILIAN PAY INCREASE.

25 April, 1922.

On April 18, 1922, the Chamber of Deputies passed a bill increasing the pay of all federal functionaries, civil and military.

The following table gives a list of the monthly increase of pay for the naval personnel. The increase become effective on 1 June, 1922.

The amounts (in Brazilian money) have been converted at the normal exchange rate.

Grade.	Monthly increase.
Vice admiral, rear admiral, captain	$75.00
Commander, lieutenant commander, lieutenant	62.50
Lieutenant (junior grade), ensign, midshipman	50.00

Grade.	Monthly increase.
Suboficers (similar to warrant officers)	$37.50
Pay clerks, first and second master sergeants (similar to chief petty officer)	25.00
First and second sergeants (first and second class petty officers)	22.50
Corporals (third-class petty officers)	20.00
Seamen and firemen, first class	17.50
Seamen and firemen, second class	15.00
Seamen and firemen, third class	13.75
Supernumerary petty officers and musicians, first class	12.50
Musicians, second class, buglers, drummers, and other ratings	10.00
Naval cadets, first two years	12.50
Naval cadets, senior year	25.00

As will be noted, the above increases are all substantial. They were justified in Congress by the naval committee as being necessary to meet the greatly increased cost of living and to place military personnel more nearly on a par in income with corresponding people in civil life.

BRAZILIAN NAVAL BASE.

25 April, 1922.

About February 1, 1922, the Minister of Marine appointed a board of prominent naval officers, headed by Vice Admiral Gomes Pereira, to make a thorough study and submit a complete report with plans for the construction of a fortified military port, concerning which the Brazilian Navy has been agitated for many years.

Inasmuch as Admiral Gomes Pereira has always been a very strong advocate of the location of such a port on Ilha Grande, his selection for this duty shows that the present administration favors its construction at that place.

The ideas concerning such a port involve a very great outlay, and it is, of course, impossible for the Brazilian Government under its present circumstances to carry such a work through. In view, however, of public statements made by the President that he intends in his administration to get under way as much work for strengthening the national defense as possible, it is quite probable that some plan will be adopted and, perhaps, even a small amount of work initiated.

BRITISH RETIREMENT RULE.

5 May, 1922.

An order in council just issued empowers the Admiralty to place on the retired list officers of the Royal Navy and Royal Marines who may be judged to be unfit for further employment by reason of any incapacity or peculiarity of temperament or other defect not amounting to misconduct, and not caused by intemperate or irregular habits of life.

Such officers may now be placed on retirement, irrespective of age or service, at such rates of retired pay, pension, or gratuity as the authorites may deem fit.

The foregoing order has been the subject of much editorial comment in the London daily newspapers, and also of interrogation and discussion in Parliament.

The Secretary of the Admiralty states:

It has been erroneously assumed in some quarters that the new order in council enabling the Admiralty to place on the retired list, irrespective of age and service, officers of the Royal Navy and Royal Marines who are considered unsuitable for further employment for reasons other than misconduct, is intended to be utilized to secure the reduction of officers' surplus to future requirements. The Board of Admiralty wish it to be known that this order in council is quite unconnected with the special retirement measures, details of which are under consideration by His Majesty's Government and will shortly be promulgated.

Hitherto it has only been possible to effect the compulsory retirement of officers under what is known as the "Misconduct order in council," which entailed the forfeiture of not less than 10 per cent of the retired pay of any officer concerned. The new order in council is designed to meet the cases of officers whose retention in the service was undesirable for reasons other than misconduct, and to whom the misconduct order in council with its attendant financial penalties would, if applied, obviously operate harshly. It has long been the practice to deal with such cases by placing the officers permanently on half pay, and it is considered it will be in the interests of the officers, as well as of the service, that the alternative of retirement shall exist in cases of this kind.

REDUCTION OF ROYAL MARINES.

26 April, 1922.

The following is quoted from the London Daily Telegraph of 25 April, 1922:

With regard to the report emanating from Portsmouth that it is proposed to reduce the strength of the Royal Marines by one-half, it was stated in official quarters that reductions have been taking place for some time. Royal Marines at present number about 12,500, and by April next year they will be reduced to 9,000.

NEW GOVERNOR OF BERMUDA.

19 April, 1922.

The King has approved the appointment of Lieut. Gen. Sir Joseph John Asser, K. C. M. G., K. C. V. O., C. B., to be governor and commander in chief of the colony of Bermuda, in succession to Gen. Sir James Willcocks, G. C. B., G. C. M. G., K. C. S. I., D. S. O., who will shortly complete his tenure of office.

Sir John Asser was gazetted to the Dorsetshire regiment in 1887, and 10 years later he joined the Egyptian Army. He served in the Nile expeditions, and in 1907 succeeded Henry Pasha as adjutant

general of the Egyptian Army. Three years later Asser Pasha commanded the southern Kordofan expedition and retired at the end of 1913. After the Great War broke out he was given the difficult post of commandant of the lines of communication in France, and in the spring of 1919 he became commander in chief of the British troops in France and Flanders.

BRITISH EXTRA COMPENSATION IN DESTROYERS DISCONTINUED.

18 April, 1922.

Notice is given by the Admiralty that the living and sleeping conditions in destroyers, flotilla leaders, sloops (other than surveying vessels), and small monitors, as compared with those which existed in the original torpedo-boat destroyers, in which "hard-lying money" at half rates was first instituted in 1894, no longer justify payment of this allowance to ratings serving therein under normal conditions. Payment of hard-lying money is to cease, therefore, as from June 1, 1922, in all the above-mentioned vessels; but the Admiralty reserve power to resume payment in these vessels when engaged in actual hostilities or, at their discretion, when engaged on special operations. The term "hard-lying money" must have originated before 1894, but it does not appear in several of the older naval dictionaries and encyclopedias.

BRITISH RESERVE FLEET.

2 May, 1922.

Admiral Sir Somerset A. Gough-Calthorpe, commander in chief at Portsmouth, recently announced that it has been decided that the organization of the reserve fleet in the future will consist of three divisions stationed, respectively, at Portsmouth, Devonport, and The Nore.

The appointments of rear admiral, reserve fleet, at The Nore, Devonport, and Rosyth were terminated April 15, 1922, and that of vice admiral commanding reserve fleet (now held by Vice Admiral Sir Richard Phillimore), will be terminated May 15, 1922.

On May 16, 1922, Rear Admiral E. Hyde Parker, now rear admiral, reserve fleet, Portsmouth, will assume command of the reserve fleet, and will continue to fly his flag in the cruiser *Courageous* at Portsmouth.

The chief of staff of the rear admiral commanding will combine his duties as such with the command of the flagship.

The other divisions of the fleet now are commanded by senior captains, who combine the command of their divisions with that of the group parent ship or one of the group parent ships where the division is organized in more than one group.

BRITISH DEFENSE FLOTILLA DISSOLVED.

2 May, 1922.

At Sheerness The Nore defense flotilla has been dissolved and the vessels forming part of it reduced to reserve status and transferred to The Nore reserve fleet.

The naval subdepot at Sheerness has been closed and the buildings placed in charge of the officer of works at Sheerness dockyard.

The naval sick quarters, which were only erected a few years before the war, have also been closed at Sheerness dockyard. Arrangements have been made for officers and men of the navy requiring medical attention to be sent to the naval hospital at Chatham.

The *Acteaon*, torpedo school ship, has been paid off, and the Sheerness torpedo school has been closed. The buildings on Burntwick Island have been placed under the charge of the officer of works, Sheerness dockyard.

BRITISH SHIPS UNDER CONSTRUCTION.

1 May, 1922.

About 14 April, 1922, Mr. Amery stated in the House of Commons that the following ships were under construction in various stages of completion: Light cruisers—*Capetown*, *Despatch*, and *Diomede*, nearly ready for service; *Effingham* and *Frobisher*, progressing slowly—*Hawkins* type; *Enterprise* and *Emerald*, no date yet assigned for completion. Destroyers—*Thracian*, just completed her trials; *Witch*, *Worcester*, and *Wren*, to be completed this year; *Whitehall* and *Shikari*, no date yet assigned for completion. Submarines—*K–26*, *L–23*, *L–26*, *L–27*, *L–53*, *L–54*, *L–69;* one new boat to be built at Chatham. Flotilla leaders—*Broke* (ex-*Rooke*) and *Keppel*, completing at Portsmouth. Aircraft carriers—2. Coastal motor boats—6. Mine layers—One new boat to be begun shortly at Devonport.

NOTE.—No provision has been made in the 1922–23 estimates for any new program beyond the laying down, early in 1923, of two battleships.

PALMYRA ISLAND.

27 March, 1922.

Is Palmyra Island a British possession or does it belong to the United States?

This is the interesting question raised in Honolulu as a result of the visit of H. M. S. *Calcutta*, a British cruiser, to Palmyra a few days ago.

The question was asked of the acting British consul.

"Frankly, I don't know," said the British consul with a smile. "It is a question I have been trying to find an answer to, but so far have failed. The colonial office list on file in my office does not contain Palmyra. The Times Atlas, however, lists the islands as a British possession; but so far as the truth is concerned I am in the dark and can not answer the question for a certainty."

Officers on board the cruiser laughed to-day when they were asked if Palmyra is a British possession.

"Certainly not," said one of the officers.

The officers of the cruisers also were emphatic in their statements that the recent trip of the cruiser had no political significance.

"It was just a friendly visit;" said one of the officers, "in fact the weather was so rough that we did not really go into port. We anchored three miles away from the island."

Belonged to Hawaii.

Palmyra Island was discovered in 1802 and was formally annexed to Great Britain in 1889, when Commander Nichols of H. M. S. *Coromant* anchored off the island and, finding it uninhabited, took it over in the name of Queen Victoria.

But in 1862, 27 years before Britain sought to annex it, Palmyra was declared to be a part of the Hawaiian Islands, and in that year Lot Kamehameha, then minister of the interior, issued a proclamation declaring Palmyra to be a part of the domains of the King of the Hawaiian Islands.

This proclamation read:

Whereas on the 15th day of April, 1862, Palmyra Island, in latitude 5 deg. 50 min. north and longitude 161 deg. 53 min. west, was taken possession of, with the usual formalities, by Capt. Zenas Bent, he being duly authorized to do so, in the name of Kamehameha IV, King of the Hawaiian Islands, therefore this is to give notice that the said island so taken possession of is hereafter to be considered and respected as part of the domains of the King of the Hawaiian Islands.

LOT KAMEHAMEHA,
Minister of the Interior.

DEPARTMENT OF INTERIOR, *June 18, 1862.*

In 1897, the Advertiser, referring to the proclamation of Lot Kamehameha, said: "This will show a prior claim to Palmyra by Hawaii, and will probably be sufficient for the United States to show when the time comes," meaning that this prior claim by Hawaii would establish America's claim to Palmyra when the time came to annex the Hawaiian Islands.

According to the attorney general's office, the Governor's office, and the archives, Palmyra has always been considered a part of the Territory of Hawaii. The archives has no data regarding its purchase on several occasions, especially with regard to whom it was

purchased from, but Judge Henry E. Cooper was the last purchaser, paying some $700 for the property, presumably from some other individual who had effected a prior purchase. According to Stone, Palmyra pays taxes to the Territory through the Ewa (Oahu) district.

BRITISH TORCH FOR CUTTING STEEL UNDER WATER.

12 April, 1922.

There occurred on April 7, 1922, a private demonstration of the use of the oxy-acetylene torch for cutting steel under water. This torch was invented by M. Eugene Royer, a director of the Chantier du Rhone, Lyon, and, it is understood, was patented on February 28, 1922. The torch consists of the usual oxy-acetylene supply pipes and an additional pipe to supply compressed air. The compressed air forms a cone around the cutting flame, and sufficient pressure is used to keep the water away from the flame.

This experiment was conducted in a cylindrical tank containing about 10 feet of water, and the tank was provided with plate-glass windows, so that the actual operations could be seen. The diver undertook to cut a 1-inch steel plate, 12 inches wide, with this flame, and succeeded in cutting about three-quarters of the distance during this experiment. He experienced much trouble due to the flame going out and the burner having to be hauled to the surface to be relighted. This was said to be due to the use of ordinary rubber hose for the acetylene and oxygen instead of armored hose, but it appeared that the real reason was that the diver advanced the cutting flame too fast and the protecting cone of air was broken. The pressures on the oxygen and acetylene tanks were about the same which would be used for open-air work, plus the difference in pressure due to the head of water. In this particular operation a pressure of 16 atmospheres was used for the compressed air, and this would have to be varied according to the depth at which the cutting took place. It was stated that 15 inches of $\frac{3}{4}$-inch steel plate could be cut per minute under water, but this could not have been accomplished during this experiment, due to the difficulty in keeping the flame going.

The owners of the British rights of this patent state that there is now being manufactured a mechanical device consisting of a steel lever, operated by a heavy spring, to strike a spark from flint to relight the burner under water, and that also a pilot flame is being developed to keep this burner lighted. It seems reasonable to suppose that this burner can be so perfected as to cut under water with almost as much certainty as it can cut in open air.

ARTILLERY TRAINING OF ROYAL MARINES.

19 April, 1922.

The British Royal Marines perform active sea duty on capital ships, cruisers, and light cruisers.

The number of marines usually assigned capital ships is 160, including the band. The number assigned other vessels depends upon the size of the ship. The lowest number, 20, is assigned to light cruisers.

The Royal Marines as an organization is composed of two subdivisions, the Royal Marine Artillery and the Royal Marine Light Infantry. The Royal Marine Artillery is specially trained for manning major-caliber batteries, and when assigned to active sea duty the Royal Marine Artillery mans one major-caliber turret complete, including the ammunition supply of the capital ship to which assigned.

The Royal Marine Light Infantry is trained for manning secondary batteries. Since the World War the Royal Marine Light Infantry is being specially trained in gunnery for manning major-caliber batteries also. Some of the Royal Marine Light Infantry have already qualified for this duty, and it is the policy that the entire Royal Marine Light Infantry shall receive this special training. This training is done on shore as far as practicable before being assigned to active sea duty.

It may be considered, therefore, that in the future the entire force of Royal Marines may be available and properly trained for manning major-caliber batteries should the emergency arise necessitating such assignment.

BRITISH NAVAL STRENGTH.

Source: Speech by Lord Lee.

8 April, 1922.

The annual dinner of the Institute of Naval Architects was held on April 5. The prominent speakers of the evening were the Duke of Northumberland, president of the society; Lord Lee of Fareham, First Lord of the Admiralty; Sir Joseph Cook, High Commissioner for Australia; and the Right Hon. Stanley Baldwin, M. P., president of the Board of Trade. The principal speech of the evening was made by Lord Lee. A summary of this speech follows.

When he accepted the position of First Lord of the Admiralty about a year ago, the outlook was very gloomy, because two of the principal nations of the world, the United States and Japan, had laid down building programs which were enormous, and if they had been carried out would have relegated Great Britain to the third position as a naval power, which would have been unbearable.

This condition could not have been avoided except by public sacrifices which the country could not have afforded and which would eventually have led to financial ruin. He considered that the Washington conference, while it had not stopped the building of powerful navies, had taken the very heart out of it in limiting battleship and other construction. He was very much surprised on his return from Washington to find what he termed "a monstrous and unjust" campaign which had been directed toward Admiralty officials by newspapers and others for a still further reduction of the navy, even beyond the minimum policy laid down by Parliament. It was unthinkable that the navy could be reduced to a point that might endanger the Empire, and he was sure that every patriotic citizen of the Empire would prefer to have a navy sufficient for its defense rather than a reduction in income tax. He stated that the Admiralty officials, who were men of noted ability and broad vision, had done everything they could to reduce expenditures in the navy, and that this thankless job had been carried out even though it blasted the careers of thousands of their fellow officers. He stated that he had fully answered in the House of Lords the attacks made on the Admiralty by the converts to air warfare, and he and his colleagues in the Admiralty were convinced that such alarmists always cropped up periodically, and that after a reasonable time this wave would pass over, just as it had when the torpedo boat and the submarine and other new devices of warfare had been first conceived. He said that he not only deprecated, but looked with sober alarm at the efforts being made by newspapers and some officials to undermine the popular belief in the navy to the preference of air power; that the navy had always been and always would be the principal defense of the British Empire. It could not be reduced to such a position as to render it inefficient for the work it was required to perform, and it had now reached the lowest point of effectiveness it had seen for a great many years, and they were unwilling for it to go any lower.

He stated that no matter what other means of defense might be improvised hurriedly, it was an absolute necessity to keep a trained personnel to man the ships of the navy, and that this training could not be done hurriedly but required time to make the personnel efficient. No matter how excellent the material might be, without a highly trained personnel it would resemble "a painted ship upon a painted ocean."

This same attitude was also evidenced in the speeches of Sir Joseph Cook, the High Commissioner for Australia, and the Right Hon. Stanley Baldwin, president of the board of trade. Sir Joseph Cook stated that the Dominions bought per capita from the mother country many times as much goods as all other nations combined. He

gave specific figures in regard to this, and stated that the United States in 1920 purchased 14½ pennies' worth of goods from Great Britain; during the same period Australasia purchased between 140 and 250 shillings per capita from the mother country. He suggested and said the matter was now under consideration of inaugurating a great emigration from this country to the waste lands of the Dominions where men were greatly needed. If this could be accomplished trade relations would be improved and the unemployed situation relieved.

The Right Hon. Stanley Baldwin brought out the point in his speech that it was being gravely considered whether this country was at present overindustralized. They had a population now between five and six times as great as the country could feed from its own soil. If it should prove that this number was as great as the country could support from its own industralism, it would be necessary to encourage emigration to the Dominions and build up the waste lands, as everyone was convinced that if this should be done, it would strengthen the Empire, as the Empire must stand or fall as a whole.

BRITISH PROMOTION.

2 May, 1922.

The Admiralty has announced that with reference to the next selection of officers for promotion to the rank of engineer commander, recommendations for which are due at the Admiralty by 15 May, 1922, the zone will include all those with 4 years' seniority and over as engineer lieutenant commander on the date of selection—namely, 30 June, 1922.

The Admiralty has announced that there will be no further reduction in the zones of promotion for executive officers (line officers) for the half-yearly selections in June and December of 1922.

In February, 1921, the Admiralty reduced the zones both for selection to captain and to commander, owing to the surplus of these officers and the congested state of the list.

In December, 1920, the captains were taken from those commanders on the list of seniority of from 4½ to 8 years, inclusive, and commanders from those in the grade below of from 2 to 6½ years; but June, 1921, the zone of selection for commanders was raised so as to include those from 5 to 8 years, and for lieutenant commanders those from 3 to 6½ years.

In December, 1921, there was a further restriction of the commanders' zone, the seniority at the lower limit being raised to 5½ years.

As there is to be no change in 1922, the new captains will be taken from commanders of from 5½ to 8 years' seniority on the date of se-

lection, and the new commanders from lieutenant commanders of from 3 to 6½ years. The effect of moving up the lower limit of the zone is to cause the selected officers to serve a longer average period in the lower grades before advancement.

It will be noted from the foregoing that the Admiralty is at liberty to change the zones of promotion from year to year, depending upon the requirements of the service.

FLOATING DOCK FOR SEAPLANES.

5 May, 1922.

There has just been completed at the Royal Dockyard, Sheerness, a floating dock for handling seaplanes. This dock is 143 feet long and has a lifting capacity of 200 tons. The construction consists of 13 buoyancy compartments, which may be filled or emptied at will. The emptying of these compartments is done by compressed air supplied by two electric compressors, which are driven by two oil-driven dynamos. These dynamos also supply current for lighting and power for workshop machinery, capstans, winches, and pumps. A large supply of gasoline is provided for and is handled by the hydraulic or water-displacement system, known as the Bywater system.

This dock is reported to be capable of handling two large flying boats, and it is presumed that the two referred to are of the *N–4* (*Titania*) type, which are of about 125 feet wing spread, motored with four Rolls-Royce "Condor" engines in two tandems equidistant from the center line and between the planes. There are no other planes known of which would need such a large dock, and, as far as is known, only one of the *N–4* type has been built.

AIR MINISTRY COMPETITION FOR CRASH PROOF AND ANTIFIRE GASOLINE TANKS.

5 May, 1922.

The air ministry competition for crash-proof and antifire tanks, started at the Royal Aircraft Establishment at South Farnborough last fall, has resulted in the first prize going to the tank submitted by the India Rubber & Gutta Percha Co. (Ltd.), the second prize to the Imber Antifire Tank (Ltd.), and the third prize to Commander F. L. M. Boothby (Royal Navy, retired).

The following details are available at present writing, and such as may be obtained at a future date will be forwarded immediately to the department:

The regulations governing the competition provided that each entrant had to submit two tanks for preliminary trials and that the

three most successful competitors in the first stage should submit four more tanks for final trial.

The principal features of the tanks submitted by the three winning competitors for the preliminary tests are as follows:

INDIA RUBBER AND GUTTA PERCHA CO. (LTD.).

	No. 1.	No. 2.
Weight of tank.....pounds..	78.75	81.25
Capacity of tank.....gallons..	37.7	38.2
Weight per gallon capacity.....pounds..	2.08	2.15
Shape of tank.....	Cubical.	.....

Each consisted of a welded sheet-steel rectangular tank with no frame or baffles of any sort, but with each side slightly dished inward, inserted in a detachable rubber case.

These tanks were slung in the fuselage by means of webbing.

IMBER ANTIFIRE TANKS (LTD.).

	No. 1.	No. 2.
Weight of tank.....pounds..	50	51.5
Capacity of tank.....gallons..	30	29.3
Weight per gallon capacity.....pounds..	1.66	1.76
Shape of tank.....	Elliptical.	.....

The tank consisted of a light-gauge tinned-steel shell, which was separated from the inside by a framework of aluminum tubing and light-gauge aluminum baffle plates. After assembly the whole of the tank had been covered with india rubber of a suitable thickness and all joints vulcanized.

COMMANDER BOOTHBY.

	No. 1.	No. 2.
Weight of tank.....pounds..	33.23	35.75
Capacity of tank.....gallons..	56.8	53.7
Weight per gallon capacity.....pounds..	.58	.66
Shape of tank.....	Cubical.	.....

The tank consisted of an inner bag of four-ply rubbered fabric capable of containing the petrol, with an outer cover of rubbered fabric which was gas tight. Noninflammable gas was introduced into the space between the two shells and maintained under slight pressure. A drainpipe was fitted to the outer casing. The tank was fixed to the fuselage by rubber shock absorber and stringing and incased in three-ply glued on.

The three competitors qualifying for the final tests were required to submit four tanks of a type fundamentally similar to those entered for the preliminary trials, any minor modifications which it was

desired to incorporate being previously submitted for the consideration and approval of the judges' committee. Certain modifications, under these conditions, were made to the tanks submitted by each of the three competitors, the details of these modified tanks being as follows:

INDIA RUBBER, GUTTA PERCHA, AND TELEGRAPH WORKS CO. (LTD.).

	No. 1.	No. 2.	No. 3.	No. 4.
Weight of tank.....pounds..	57	54.5	57	54.5
Capacity of tank.....gallons..	29	29	29	28.8
Weight per gallon capacity.....pounds..	1.96	1.88	1.96	1.89
Shape of tank.....	Cubical.	.....	.....	.....

IMBER ANTIFIRE TANKS (LTD.).

Weight of tank.....pounds..	52.5	51.5	50.5	51.5
Capacity of tank.....gallons..	30	29.7	29.7	29.5
Weight per gallon capacity.....pounds..	1.75	1.73	1.70	1.75
Shape of tank.....	Elliptical.	.....	.....	.....

COMMANDER BOOTHBY.

Weight of tank.....pounds..	36.5	35.5	33	35.5
Capacity of tank.....gallons..	31.5	31.5	31.5	31.5
Weight per gallon capacity.....pounds..	1.16	1.13	1.05	1.13
Shape of tank.....	Cubical.	.....	.....	.....

The method of testing the tanks in the preliminary trials was as follows:

Each tank was mounted in a wooden structure similar in construction to the fore part of the ordinary tractor small type aircraft. The concrete body formed to represent an engine was mounted in front of the tank. The structure containing tank and engine was released down an I section girder runway approximately 100 feet high so arranged that the body struck the ground at an angle of approximately 45° to the horizontal. It was originally intended to crash the structure on a concrete bed. It was, however, found necessary to modify the conditions, and the bed was covered with a 2-foot 6-inch depth of sand. The conditions, then, briefly, were those of the typical aircraft crash, the engine partially burying itself, the tanks coming into violent contact with the engine. As, however, the fuselage structure at the moment of impact had attained a velocity—allowing for friction and air resistance—of approximately 50 miles per hour, the conditions were more severe than would prevail in a crash from which a human being could hope to escape with his life.

In the final trials the following tests were imposed:

Two tanks of each type were submitted to acceleration and crashing tests and the remaining two to firing tests, the acceleration test being arranged to imposed stresses approximately equivalent to four times that due to gravity.

The tanks mounted in the fuselage structure were fixed to a pendulum raised to the requisite height and released by a trip gear. A tank of each type submitted to this test was given two swings, and was then placed on one side for 10 to 15 minutes, at the end of which, from outside examination, nothing untoward had occurred.

The crashing tests were carried out in a similar manner to that adopted for the preliminary tests, with the exception that flints were substituted for sand on the crashing bed.

The tanks submitted to firing test were mounted to their fuselage structures and subjected to bursts of five rounds of Vickers machine-gun fire, composed as follows: One armor piercing, one incendiary; two armor piercing, one incendiary.

A system of judging was adopted whereby each judge was enabled to record an independent opinion on a common basis. For the preliminary tests this system was on the following basis: As regards weight, the basis of 100 marks was taken as representing a tank which, complete with fittings, conformed to the specified weight of 1.75 pounds per gallon capacity. For each variation of a decimal point of this weight-capacity ratio, six marks were added or deducted from the 100 marks. In addition, as a means of correction in the case of tanks whose capacity was outside stipulated limits, the following formula was adopted: $\frac{\text{Required capacity.}}{\text{Actual capacity.}}$

Tanks received marks for the attributes in the following proportion:

(*a*) Crash-proof qualities, 100 marks maximum; (*b*) remaining attributes, 100 marks maximum; (*b*) was divided up as follows:

	Marks.
Durability under service conditions in the absence of accidents	25
Indifference to extremes of temperature	25
Adaptability of design to large capacities	10
Simplicity of construction	10
Adaptability of design to various shapes	10
Accessibility of fittings	10
Cost of production	10

In awarding marks for the various attributes stated above, the ordinary mild-steel service tank was taken as a standard.

This resulted in the following competitors being placed in the order named at the end of the preliminary tests: First, Commander F. L. M. Boothby; second, Messrs. Imber Anti-Fire Tanks (Ltd.); third, India Rubber, Gutta-Percha & Telegraph Works Co. (Ltd.).

In the final tests the marking was made on the following basis: 100 marks maximum for each crash test, 100 marks maximum for each firing test, and 100 marks maximum for remaining attributes, a totatl of 500 marks.

LONDON TERMINAL AERODROME.

7 March, 1922.

The authorities governing commercial aviation, which use the terminal aerodrome at Croydon as a base, are providing a large map of the London-Continental airways, on which the state of the weather at points along the various routes will be indicated hour by hour; this is now being erected at the London Air Station. A complete system has been built up to keep the pilots of the air expresses, which are equipped with radio, constantly supplied with weather reports, and this information will now be exhibited for the benefit of air travelers and the public. Reports are received every hour from Biggin Hill, Lympne, and Dungeness, on the English side of the Channel; from Cape Grisnez, St. Inglevert, Beauvais, and Paris, in France; Ostend and Brussels, in Belgium; and Flushing, The Hague, and Amsterdam, in Holland. Wind direction and speed, visibility, and cloud heights are all observed and reported by wireless to the air stations. At Lympne the latest reports from Biggin Hill and Croydon are laid out in big white letters on the aerodrome, so that pilots arriving from the Continent can see what weather they are to encounter between the coast and London.

BRITISH FREIGHT AIR SERVICE.

7 March, 1922.

Arrangements are being made by an aviation company in Great Britain for a freight air service between London and Paris, beginning in April. The name of this company is not announced. The company plans to start planes daily from London (terminal aerodrome, Croydon) and from Paris (terminal aerodrome, Le Bourget) at 2.30 a. m., freight from the Provinces to be shipped to London or Paris after business hours of the preceding day, to be collected by motor from the railway receiving stations between midnight and 1 a. m., and to be delivered at Croydon or Le Bourget in time for the 2.30 a. m. departure. The course is now so well lighted and the radio service so far advanced, although still considerably complained of by the pilots, that night flying is considered within easy possibility.

It is believed that this company will come under the subsidy and that it will either be operated by the two new companies being formed in England for commercial aviation work—one, an old automobile company known as the Daimler Hire and managed by Col. Searls; and the other, a new company being formed under the name of Aerial Transport Co. (Ltd.). These two companies are both approved by the Air Ministry for subsidies.

BRITISH GOLD RESERVE.

13 April, 1922.

The amount of paper money circulating in the United Kingdom on 5 April, 1922, was £145,392,275 in Bank of England notes and £298,697,304 in Treasury notes.

There is a great deal of difference between a bank note and a Treasury note. The £1 not has no relation at all to the £5 note.

Bank notes in denominations of £5 to £1,000 are issued by the Bank of England under somewhat peculiar conditions. The bank is not a State institution; it is a joint-stock company with certain privileges and obligations conferred upon it by statute, founded in 1694 to help finance a continental war: it advanced £11,015,100 to the Government, and against this debt it was allowed to issue notes. This debt has never been repaid and the notes are still issued.

The bank can also issue £7,434,900 against the securities. Thus there is a total of £18,450,000, which is fiduciary issue—that is, not backed by gold.

Every note circulated above that figure must be backed by gold. A £5 note can not be printed until £5 in gold has been placed in the vaults. As the note issue is now £145,392,275 there is in the Bank of England in hard metallic gold no less a sum than £126,942,275.

Every holder of a bank note has the definite legal right to exchange it for gold upon presentation at the Bank of England, and although these notes are legal tender to any amount they are not so at the bank. In other words, the bank can not pay its debts with its own notes.

Treasury notes were first issued in 1914 and were an innovation not on account of their low denomination (the bank had issued £1 notes many years before), but because they were backed by the Treasury.

Like bank notes they are legal tender to any amount, and upon presentation at the Bank of England they can be changed into gold even to-day.

But there is not the same backing of gold. Out of £298,697,304 only £47,950,000 is backed by gold.

There was originally no limit to the amount of Treasury notes issued, but in 1920, when the fiduciary issue was some £321,000,000, the Treasury decided that the amount must not be increased and that the maximum in circulation for any year must not be higher than the maximum in the previous year. It therefore appears that there will be a gradual reduction of the Treasury notes in circulation.

BRITISH AND FRENCH TO ADOPT AIRWAY RULES.

21 April, 1922.

On April 7, 1922, a plane of the Compagnie de Grande Express, type Farman *Goliath*, flying from Paris to London, collided, near Beauvais, France, with one of the Daimler Hire Co.'s *D. H. 18's* en route from London to Paris. The planes crashed to the ground and seven of the eight occupants were killed. An officer from this office had engaged transportation via the Daimler Hire Co. from Paris to London, but, after consultation with the Paris manager of the Daimler Hire Co., the flight was canceled, due to the condition of the weather. There has been considerable complaint from pilots due to the weather reports, which, although elaborately arranged for various points along the route, are not always given with the best judgment, and on this day the visibility was reported at 2 kilometers, which meant that from a height of 15 to 20 feet the visibility was 2 kilometers, but it was not realized that the clouds were frequently only three or four hundred feet high and that from this height the visibility was markedly less. The pilots of the respective planes were flying just in the bottom of the clouds at an altitude of approximately 400 feet and were following a prominent landmark from Paris to the coast—namely, one of the State highways, which is very straight and well marked, due to its white surface and border of trees.

In view of the fact that, although of remote possibility, the crash proved that the danger does actually exist, the firms operating aircraft between London and Paris held a conference at the London Terminal Aerodrome at Croydon, at which the management and the operating pilots were represented, and the following resolutions drawn up governing the handling of traffic:

1. Continental airway pilots to meet at once and settle on clearly defined air express routes above Britain, France, Belgium, and Holland.

2. That "keep to the right" should be the universal rule when following an air road.

3. That in all new expresses the pilot must have a perfectly uninterrupted view straight ahead.

4. That every commercial aeroplane must be equipped with wireless telephones.

5. That additional ground wireless and weather reporting stations should be established at Poix and Noailles on the French section of the London-Paris airway.

6. That distribution of airway weather reports should be accelerated, and that reports should also be obtained from Compiegne.

7. That the terminal air stations of Croydon and Le Bourget should now be in constant communication with each other by wireless telephone, as well as by ordinary wireless.

8. That the question of "interfering" with wireless telephony by the powerful Eiffel Tower wireless station should now be investigated.

9. That the ground wireless station at St. Inglevert on the French coast, which was destroyed by fire recently, should now be replaced.

BRITISH SHIPPING AND SHIPBUILDING.

4 April, 1922.

Shipbuilding in the United Kingdom reached its high-water mark in the early part of 1920. Shipping circles were still feeling the effect of the unnatural conditions existing at the end of the war and work in the shipyards was going on feverishly in an effort to fill the orders received during the war or just after the armistice. Adversity for shipping interests really began before the end of 1920. Difficulties multiplied steadily until the "shipping bubble" completely collapsed, with more or less disastrous results for owners, operators, builders, seamen—in fact, for all the ramified interests related to ships.

The simplest explanation of the conditions is that there have been too many ships and too little cargo. World tonnage of ocean-going vessels in 1921 has been considerably in excess of what it was in 1913. World trade, on the contrary, during the year probably has amounted to less than 75 per cent of normal pre-war volume. Under the circumstances there has been no escape from laying up of surplus vessels, persistent decline of ocean freights and time-charter rates, profit-destroying competition for such cargo as was offered, and ship values catapulting from the lofty heights to which the false boom of 1919 and 1920 had carried them. It did not take long for the influence of these conditions to work back into the shipbuilding industry and related trades, producing a degree of stagnation and a gloomy prospect, the equals of which are said not to have been seen before.

The trouble really began with the prodigious efforts on all sides to replace war losses of shipping and the failure to realize after the war ended that the demands of world trade would not at once call for a bigger merchant marine than there was in 1914. The records of tonnage launched in the world during the three years 1918–1920 reveal a rate of expansion far greater than ever approached before, but mainly outside the United Kingdom.

BRITISH ECONOMIC CONDITION IN 1921.

1 April, 1922.

General Statement.

It is commonly believed by British merchants that 1921 marks the bottom of the post-war depression. If future events prove this to have been the case, conditions in 1921 will be taken as the

level from which to measure the revival of industry and the recovery of trade during the new period of better business that 1922 is expected to introduce. For this reason, if for no others, it is desirable to take account of what the year has been, while conditions are still fresh in mind.

No other year in modern experience has presented such a variety and number of obstacles in the way of normal business activity. In previous periods of depression it generally has been possible to find some guide for action or judgment in conditions of earlier experiences. But this depression has baffled the wisest minds on account of complications of an entirely new sort. Old plans of procedure were no longer any good, and where to find a safe basis for new lines of policy was a puzzle.

Discouraging and disastrous as the year has been, there is nevertheless some satisfaction in recalling the chief difficulties which business has had to face as evidence of what degree of adversity British industry and trade can weather. Some of the difficulties have been felt by the United Kingdom perhaps no more and no less than by other countries, because of the world-wide extent of their application. Others have applied to Britain alone, or have been felt more acutely here than anywhere else.

In the first group are the record-breaking collapse of prices; the burden of heavy taxation; the unprecedented currency inflation and disorganization of exchanges, especially in Continental Europe; the persistence of war-time wage levels; the freezing of profits and capital in high-priced supplies of raw materials and in stocks of finished goods at home and overseas; cancellation of contracts or suspensions of orders; unsettled politics, especially in the Far East; the abrupt fall in the price of silver; and the chaotic state of European economic affairs, with its consequent low level of producing capacity and purchasing power.

Among the factors more or less peculiar in their effects on Britain have been a surplus of shipping; the aftermath of war-time stimulus to manufacturing industries in foreign countries and notably in the British Dominions; the growing strength of the policy of tariff protection or extreme nationalism in industrial and trade policies; the liquidation of Government-owned war stocks; labor troubles, especially with the coal miners, and the most disastrous strikes in recent years; the Gandhi boycott of British goods in India; the Irish issue; the problems of leadership in the solution of European affairs; and the consequences of industrial consolidation and recapitalization at the peak of inflated prices and values.

Remedies for several of the difficulties already have been successfully applied, and various others are far enough along in the process of correction as that their early elimination is assured. Some of the

more deep-seated and far-reaching factors, however, like inflated currencies, disorganized exchanges, lowered producing capacity, and political uncertainties, have yielded but little to corrective measures so far advocated. In fact, the opinion in British commercial circles is that these economic and financial ills can be cured only gradually, and that the progress of British trade recovery will depend on the persistence and skill with which the whole business community carries on to the best of its ability in spite of the handicaps imposed.

The year 1921 has at least revealed very clearly the full extent of postwar difficulties which must be removed if anything like former conditions of industry, trade, and finance are to be restored, for Britain as well as for the rest of the world. During the future progress of restoration there likely will be much to learn from looking back at conditions as they have been in this year of world-wide crises.

British Foreign Trade.

The chief interest in reviewing British foreign trade during 1921 lies in a consideration of what actually was accomplished in the face of these difficulties, rather than in a rehearsal of the trials and tribulations themselves. Preliminary estimates indicate a net adverse balance of trade in excess of £55,000,000, as compared with a net favorable balance in 1920 amounting to about £175,000,000. In years prior to the war, the net favorable balance commonly was estimated close to £200,000,000. The sharp swing to the other side of the ledger in 1921 is a fair measure of what the year has been. The direct balance on movement of merchandise alone accounts for only a part of this reversal. Shrinkage of so-called invisible exports has been heavy, especially as regards earnings of shipping, but also in returns on foreign investments, as compared with prewar figures. Commonly counted on to provide a comfortable margin over the amount needed to pay for the normal excess of imports, the invisible exports in 1921 are estimated at not more than £215,000,000, while the excess of merchandise imports over exports will probably reach £270,000,000.

Poor earnings of shipping, figured to be about one-fifth as large as in 1920 and not over two-thirds of pre-war earnings, are, however, directly due to the depression of trade. The shrinkage of returns from foreign investments is, on the contrary, largely an aftermath of the war and only to a minor extent the result of current trade conditions. Improvement in the net trade balance in the new year depends, therefore, mainly on increased trade activity to stimulate exports and to restore conditions for profitable employment of British shipping.

Export and import totals for the year are still far above the values for 1913, in spite of the unprecedented decline of prices from the swollen levels reached in the false boom of 1920.

British Exports and Imports, 1921 and 1913.

The excess of imports is one of the largest ever experienced outside of war years, and is good evidence that imports must continue to be heavy, although export trade is relatively poor. It is necessary, however, only to recall the level of price index numbers during the year to realize that the volume of goods has been far below normal.

It is significant that during the second and third quarters the average monthly value of exports was but little more than 10 per cent above the 1913 figures, and details for the several months show that during the three months most affected by the coal strike (May, June, July) the value of exports actually was below the level for the corresponding months of 1913. Since then, however, such substantial recovery has been made that the last quarter compares favorably with the first quarter, when due allowance is made for effects of declining prices on export values. This vigorous recovery of trade after one of the worst strikes in recent times is one of the few encouraging developments of the whole year.

Manufactured goods and cheap production of coal near industrial centers are the backbone of British export trade.

DISPATCH FROM CHINA.

Source: Reliable.

8 May, 1922.

Wu Pei Fu's successful encircling movement at Chang Hsintien with 5,000 of Christian General Feng's best troops, while he kept up his front attack with the rabble untrained soldiers whom he took over from Tsao Kun, not only defeated Chang Tso Lin's forces at Chang Hsintien, but led successively to panic, demoralization, and complete collapse of Chang's entire army, which everywhere fled, sometimes in orderly retreat, sometimes in precipitate confusion, and is now scurrying for shelter to Manchuria.

Up to noon on the 6th over 20,000 troops had passed through Tang Shan. Twenty-one trains, mostly very long and packed full of soldiers, had passed through Tientsin. Later trains stopped before arrival at Tang Shan because of congestion in Tang Shan, Kai Ping, and Ku Yeh. Under orders of Chang Tso Lin 7,000 troops had detrained with their arms. All troops on the railroad appear to be half starved; efforts are being made at Tang Shan to feed them.

Not all of Chang Tso Lin's troops are on Peking-Mukden Railway. An observer motoring from Peking to Tientsin on the 5th saw column of from 5,000 to 10,000 marching northward, and presumably others took the same route. Others remain between Machang and Tientsin. Still others sought escape by Peking—Sui Yuan Railroad. Wu Pei Fu on 5th to 6th proceeded from Feng Tai to Tientsin, where he still was at noon to-day. Ten thousand Wu troops are reported to be at Chung Liang Cheng.

The international train, after a short interruption of traffic, arrived in Peking from Tientsin on the evening of the 6th and reported road undamaged and no Fengtien soldiers anywhere. Regular train left Peking this morning, but had not reached Tientsin at 4 this afternoon. Morning train from Tientsin to Peking turned back.

Much apprehension in Tientsin on the 4th and 5th. Newspapers published reassuring statements from consular body on the 6th, declaring adequate measures had been taken by commandants of various foreign detachments and by Chinese police authorities to prevent incursions into the foreign settlements, including the ex-German and the Russian concessions, by armed stragglers from retreating Chinese forces. An American officer who returned to Peking from Canton via Tientsin on the international train yesterday reports crisis in Tientsin over.

Tientsin and Peking were relieved of danger of incursions of defeated soldiers, first, by Chinese and foreign military forces, including police, and, secondly, by complete and swift withdrawal of Chang Tso Lin's forces in consequence of the consternation and demoralization which Wu Pei Fu's initial victory spread amongst them. Our reenforcements were a valuable factor in the military protection, especially in Tientsin. Military authorities in Peking direct 30,000 Feng Tien troops, and foreign office, declaring Chinese Government had no other funds, applied on the 6th to the diplomatic body for release of customs revenues to feed them and send them home, and the diplomatic body released $300,000 for that purpose.

No intimation of Wu Pei Fu's next move. Report of cutting railroad at Lan Chow without confirmation.

PERSONNEL OF CHINESE ARMY.

23 March, 1922.

Since the first revolution to the present day the history of the Chinese Army is a story of anomalous increase and the complete disintegration of the various units. The main reasons which have contributed to the decline of the national army have been due to the

frequent revolutions, interprovincial and interparty fueds. The introduction of the Tuchun system by President Yuan Shih-kai has been the signal for a general scramble for power by the independent commanders with their own followings after the death of Yuan Shih-kai. Other factors have also been introduced to hasten the disintegration of the national army, such as the enrollment of large bandit bands taken into the army in districts in which they could not be suppressed and the usurpation by military commanders of civil offices and their consequent entry into politics.

The national army created by Yuan Shih-kai has been split into a great number of smaller armies, each loyal to the particular commander or military governor who pays, feeds, and clothes it, and loyal to him only as long as he performs these functions. Rivalry among these high military leaders and mutual suspicion have prompted indiscriminate recruiting often either without the consent or knowledge of the central government. In the south forces spring up championing this government or that, this cause or that, again following the particular leaders who provide for them, and this has gone on throughout the land until no single office or officer can give more than an estimate of the number of soldiers under arms in China.

CONDITIONS IN SHANTUNG.

8 April, 1922.

Settlements for the Japanese in Shantung.

On April 4 "The Tsinan Jih Pao," under the caption "The Japanese Government desires the opening of settlements," said the following:

The question of withdrawing the troops along the Shantung Railway was formally concluded on March 27. Since then the Chinese and Japanese commissioners have been conferring about the question of opening settlements for the Japanese along the railway line. This question is closely connected with the problem of controlling the Japanese along the line. The Japanese are hoping that besides Weihsien and Showtsun the Chinese Government will also open Poshan, Fangtse, Tsingchow, Kaomi, and Tzechwan. At the time of the Shantung pourparlers at the Washington conference, the Chinese delegates stated that settlements would be opened at suitable places along the railroad. On the basis of this it is hoped that the Chinese Government will accede to the wishes of the Japanese.

No doubt one of the coming questions will be where the Japanese are to reside. Yesterday I was talking to a foreign-trained Chinese who had just spent several weeks in the vicinity of Poshan. He says that in Poshan, Hungshan, and Tzechwan the Japanese have invested some $10,000,000, and that he thinks, in spite of what may be decided officially, the Japanese civilians will stay on at these places.

Financial Aid for Japanese Residing in Shantung.

On April 4 "The Tsinan Jih Pao" gave the following Tokyo wire:

The Government has decided to loan at a low rate of interest $2,000,000 to the Japanese residents in the Province of Shantung to help them over their difficulties.

Japanese Tourists in Shantung.

A party of 400 to 500 Japanese, mostly from Japan, visited Taian and Chufu during the Ching Ming holidays.

Withdrawal of the Japanese Troops.

An aide de camp of the Mikado, a brigadier general, has come from Japan to oversee the withdrawal of the troops. The yard of the Tsinan Japanese barracks is filled with boxes and crates preparatory to leaving.

Between the Japanese consulate and the Japanese hospital in Tsinan the Japanese are building what the Chinese say will serve as a barrack for ununiformed—i. e., without uniforms—Japanese police. I went through the building yesterday and confess that its general plan and cement cupola (on the roof) suggest military rather than civilian use.

There are several hundred Chinese railway police in Tsinan to take over the policing of the Shantung road when the Japanese soldiers are withdrawn.

Japanese Encourage Bandits.

There is every evidence that the Japanese are encouraging the bandit activities around Tsingtau. It would not be surprising if, after the Chinese have taken over the road, or a part of it, bandits should interfere with the operation of the railroad.

Japanese Still Lease Land in Tsingtau.

I learn from an absolutely unimpeachable source that the Japanese are still leasing land in Tsingtau. Although it is no longer done in the former open way, it is still possible to lease lands and is being leased right along.

BOLSHEVISTS IN SHANGHAI.

7 April, 1922.

Attention is invited to the following excerpt from the North China Daily News of March 31, 1922:

The Korean Bolshevists.

HOW THE INDEPENDENCE MOVEMENT HAS BEEN CAPTURED BY THE SOVIET.

One of the hypotheses which has grown out of the examination of the two Koreans whose attempt on Baron Tanaka's life resulted in the death of Mrs.

Snyder on Tuesday afternoon is that the misguided men, now in custody, were directly inspired by Bolshevist agents and have been, together with many others now resident in Shanghai, in the pay of a soviet bureau in Irkutsk.

Independent investigations made by a member of the staff of this paper would seem to go far toward proving this assumption.

The existence of not only one but two Korean Bolshevist parties, working under Russian inspiration and subsidy, has been well known to the police of both Peking and Shanghai for nearly a year. Early in October last the Peking police raided a house occupied by Koreans in the North City east of the Drum Tower, and discovered enough literature and correspondence to prove that the occupants were in the pay of Russian propagandists. Subsequently three men were arrested and held for some days. These men were Li Sung, Kim Chulhun (alias Lin), and Dr. Hun Chin-san. A fourth member of the group, an English-speaking Korean named Chang, then recently returned from Siberia, elicited influence in quarters sympathetic to the Korean cause, and the men were released after a few days' detention. The Peking police, however, put in force a system of surveillance which made life very uncomfortable, not only for the agents of Irkutsk but for all other Koreans as well, and the result was a general exodus.

Kim Lip and His Gold.

Headquarters of two groups subsidized by Irkutsk and Chita, respectively, were moved to Shanghai, and in November the local police became aware of the growth of a colony of Korean conspirators in Shanghai having Siberian affiliations. The Chita group was represented by a Russian-speaking Korean named Kim Lip, with aliases beyond count, who arrived in Peking early last summer with Russian gold to the value of $400,000. He lived for the most part in the Western Hills while at Peking and devoted all his energies to the conversion of his gold into negotiable silver.

This generous sum naturally focused upon him the attention of all of his compatriots, of whatever party. What might be called the orthodox Korean revolutionary party, which then stood out firmly against compromising relations with the Bolshevists, sought Kim Lip in the hope of showing him the error of his ways and of adding his fund to the general revolutionary fund. The Irkutsk agents, who were laboring in this vineyard in return for traveling expenses and 100 Mexican dollars each monthly, naturally hoped to better their condition by amalgamation with the lucky Kim Lip. He evaded all parties, however, and when overtaken in Shanghai by the Irkutsk folk refused to divide.

He was therefore accused of malappropriation, and was shot in Paotung Road on February 11 of this year. It would appear, however, that the funds, or whatever was left of them, did not pass into the hands of the Irkutsk group, but descended to the other members of the Chita representation, and have since been augmented or will be augmented by a sum of $600,000 brought by a Russian who is assuming the direction of the activities.

The assumption is that the men who shot Mrs. Snyder are not members of the Chita group, but of the Irkutsk group, working under the direction of a Russian whose name, transmitted through Chinese characters, is something like Simidski. The Koreans in custody now admit that they belong to a Bolshevist group. They claim to have come from Peking, and the one who gives the name of Kim claims to be the leader of a Korean communist party in the metropolis and to have come here on March 24 to represent his group in the tragedy enacted on the Bund on Tuesday. Neither he nor Au, who has now

decided that his name is Wu, will admit, however, that he has been in Siberia or that he knows any of the well-known leaders of either the orthodox revolutionary party or the Bolshevist group.

Wu claims to have been in China 14 years and to have divided his time between Hankow and various places in Chihli. He speaks fairly good northern Chinese and is strongly suspected of being a certain Wang, who was in possession of a .25-caliber Browning pistol in Peking last year and who was then interested in the movements of Kim Lip. He says he came to Shanghai in January.

Inquiries are being made concerning the identity and history of Kim Eak-sang, one assumption being that he may be the Kim Chul-hun arrested in Peking by the Chinese police in October. He speaks a few words of English and as much Chinese, but denies a knowledge of Russian. While claiming leadership in a Korean communist group, he admits receiving funds from Siberia.

Korean Movement All Bolshevist.

While the killing of Kim Lip and the more recent shooting affair on the Bund are the first public manifestations of the activities of Russian soviet influence through orientals in Shanghai, their influence has been felt for many months throughout China and the Orient in Korean communities. The leaders of the orthodox independence movement last year rejected every suggestion of accepting communist support. The Bolshevist agencies were then isolated and seemingly powerless. In the intervening months the tables have been turned. The independence movement as such is virtually dead, the leaders have been discarded, and the young enthusiasts among the Koreans in China, Manchuria, Siberia, and Korea itself have been enlisted as allies of the soviet. Promises of money, bombs, arms, and eventually of tangible support against Japan have been too severe a temptation to enthusiasts weary of the poverty-stricken revolutionary organization, lacking both money and arms, and seemingly unable to elicit the sympathy or support of any foreign power. The terms upon which liberal Bolshevist support is given are that the government of the liberated Korean State is to assume the form of the soviet in alliance with the Russian Soviet.

The recent manifestations of this trend of Korean energy indicate that it is going to develop into something much more hostile to the peace of Shanghai, much bolder, more insidious, and more ruthless than the traditional independence movement, which elicited some sympathy in and out of the settlement, particularly among Chinese of all classes.

CHINESE WAR COLLEGE.

15 March, 1922.

The War College, under the direction of the general staff, has come to be one of the most important military institutions in China and, but for a shortage of funds, would develop into a useful school. Candidates for training in the War College are chosen by the provincial authorities from among the younger officers on active service in the regular army. To qualify they must have served two years as commissioned officers. The number chosen is limited and the standards are set high. After a two-year course graduates from the War

College are again appointed to active service and invariably enjoy rapid promotion. Four Japanese officers are attached to the school, and foreigners of other nationalities give language courses.

In Peking there are an army medical college, an army veterinary college, a Q. D. M. college, a police college, and a gendarmerie school.

THE FRENCH MEDITERRANEAN SQUADRON AND AVIATION.

8 April, 1922.

The battleships *Bretagne* and *Provence*, accompanied by five torpedo boats, effected in November, 1921, a series of exercises in the vicinity of Les Salins and the Golfe Juan. The vice admiral, commandant in chief, took advantage of their presence off St. Raphael on November 9 to effect a combined maneuver with the seaplanes of St. Raphael and the squadron seaplanes.

The theme of the maneuvers was as follows:

An enemy squadron is making for St. Raphael. The seaplanes of St. Raphael reconnoiter it and report its composition, position, formation, route, and speed, and maintain contact.

The squadron aviation, acting on information from the seaplanes, attacks the enemy.

Four seaplanes and nine airplanes successfully took part in the maneuvers, notwithstanding unfavorable weather (overcast sky, gusts of wind, and disturbed sea).

The seaplanes, formed in two section, successfully took and maintained contact, notwithstanding the continuous evolutions of the battleships. (It is to be remarked that the first section was not discovered by the squadron.)

The squadron aviation, after being informed by the seaplanes, attacked the squadron in the following conditions:

Two groups of pursuit planes, successively diving from 3,000 meters, bombed the superstructures of the battleships.

Though their speed was reduced by a strong head wind, which exposed them for a longer time to antiaircraft fire, the planes perfectly succeeded in this bold and delicate maneuver.

Two other groups of planes flying at a height of 3,000 meters then proceeded with a sham bombing of the squadron.

The planes made a very good showing, and the bombing observers considered that the zigzags of the battleships in nowise troubled them.

The last maneuver consisted of dropping bombs from a low height on the bows of the battleships. This maneuver, effected by Lieutenant Teste on a Hanriot two-seater, was the cause of an acci-

dent. During the second passing, after a dive, the motor of the machine did not resume running, and the plane had to alight on the water. A whaleboat launched by the *Bretagne* picked up the aviator.

These maneuvers were as productive of instruction for aviation as for the squadron and once more showed the qualities of intrepidity of our flying personnel.

FRENCH AVIATION PERSONNEL.

13 April, 1922.

The French general staff have assigned to naval aviation duties for 1922 the following officers and enlisted personnel:

Officers:	
Flying	120
Ground	40
Total	160
Enlisted ratings:	
Flying	200
Ground	2,350
Total	2,550

FRENCH FREE BALLOONS.

8 April, 1922.

It is absolutely indispensable for dirigible pilots and kite-balloon observers to have a thorough knowledge of the conducting of free ascents. A free balloon is in fact but a dirigible with deranged motors or a captive balloon which has broken its cable. It is necessary to be able to meet such eventualities. That is the reason why so often free balloons are seen leaving the Naval Aviation School center at Rochefort.

On November 2, 1921, a spherical balloon of 1,200 cubit meters mounted by Lieutenant Bonnot and four other balloonists was inflated at Rochefort and left in a light west wind and foggy weather.

Three hours of a calm ascent, during which the altitude reached did not exceed 400 meters, brought the balloon to Taillebourg, where a passenger disembarked. After two hours' rest and supplies the balloon resumed its flight and in the very dark night continuously scaled hills, gently redescending the opposite slope. The route, followed with some difficulty, remained constantly east, and in the morning the balloon reached St. Germain en Belle, Correze. The day was passed in numerous catchings of the guide rope. The wind was almost nil, a persistent rain soaked balloon and cordage, and in the evening the balloon landed at Sornac at the limits of Correze.

After a night's rest, two hours of repairs to the guide rope, and on November 4, the wind having sprung up again, two aviators continued their air route. The balloon followed a course at a low height through the valley of Sioulle and then, resuming its eastern route, mounted to 1,600 meters. In the evening it landed at Charlieu, from whence it left on the following day. This time it did not leave its bank of fog till having passed between the two crests of the mountains of Beaujolais and having reached the valley of the Saone.

Finally, on November 6, through lack of ballast, the aviators were obliged to rip their balloon at Replonges, Ain, having effected six landings and covered 520 kilometers in 31 hours of ascent.

FRENCH ARMY UNIFORMS.

1 April, 1922.

New Uniforms for Officers.

The existing service uniform of the French Army is to be supplemented by a dress and full-dress uniform for officers of all grades.

It is contemplated that the dress uniform will be for town wear, for wear when on duty other than with troops, or for use on leave, etc. The full dress, which will be the dress uniform plus a sword, epaulets, and other embellishments, will be for wear at formal functions.

In general, the new uniform will be as follows:

(*a*) A long-skirted, pocketless blouse.

(*b*) Long trousers with side stripes 5 centimeters in width.

(*c*) Black leather elastic bootees.

(*d*) Metal epaulets for full-dress wear.

(*e*) A woven sword belt with adapter for sword.

(*f*) A straight sword (yellow or white hilted, according to branch of service) with sword knot.

Wearing of new uniforms, optional at first, will be obligatory after April 1, 1923.

The change will be applicable to all arms and branches of the military service except—

(*a*) The firemen (Sapeurs-Pompiers).

(*b*) The Republican Guards (Garde Republicaine).

(*c*) The military police (gendarmerie).

FRENCH MOBILIZATION.

1 April, 1922.

The French are now prepared to mobilize in case of war 10 classes in addition to those now with the colors.

All reserves and some territorials are called to the colors by mobilization. Thus on mobilization in 1914 the active army of

630,000 was immediately increased by reserves to 1,722,000, while 184,000 territorials were also taken into the divisions which were filled up or were created new. The plan proposed by the chairman of the Senate military committee in September, 1919, calls for an instant response of 2,000,000 men to mobilization orders.

On mobilization the vice president of the Conseil Superieur de la Guerre takes command in the field. His general headquarters is organized from officers and other personnel of the Etat Major de l'Armee, who are detached for this purpose.

Army staffs and the services of the rear are also organized with officers detached from the Etat Major de l'Armee. Commanders of the armies in the field are chosen from the members of the Conseil Superieur de Guerre.

Corps staffs go with their troops into the field, excepting that one or two officers remain behind to organize a new regional staff from among reserve or retired officers.

In this manner army staffs are developed to about 90 officers and 700 enlisted men each. Meanwhile, from reserves, etc., the staffs of the corps and divisions are somewhat increased, so that on mobilization a corps staff will have 60 officers and 350 enlisted men, while a division staff will have 20 officers and 140 enlisted men.

FRENCH AVIATION COMPANIES.

7 March, 1922.

There exists at present in France five companies operating aircraft (heavier than air) commercially. Two companies—namely, Compagnie des Messageries Aeriennes and Compagnie de Grande Express—operate between London and Paris. One company operates between Paris, Antwerp, and Brussels, one company operates between Paris, Prague, and Warsaw, and one company between Toulouse, France, and Casablanca, North Africa.

FRENCH FOREIGN POLICY (Particular Reference to Conference of Genoa).

5 April, 1922.

While not attempting to reproduce these speeches in the chamber by the present Premier, M. Poincaré, by the former Premier, M. Briand, and by the man said to aspire to the premiership, M. André Tardieu, it is thought advisable to record certain salient points of policy as developed in the discussion of matters at Washington, Cannes, and Genoa.

M. Briand, defending his policy in Washington, said:

That he had won American sympathy for France's army as was necessary for her defense against German action.

Pointed out that France's first demand for 300,000 tons of capital ships was logical, since the tonnage of capital ships to be allowed each nation was to form the basis for her quota for lighter craft and for submarines.

That, while, before the Conference of Washington, the ratio in capital ships was as 16 to 1 against France, the result of the conference was to reduce this ration to $2\frac{1}{2}$ to 1.

As to Cannes and Genoa, Briand insisted that he had committed France to nothing.

That his conferences at Cannes had been interrupted by his sudden return to Paris and resignation, all before conclusion could be reached, excepting as to the proposed Conference of Genoa and its agenda.

That, even as to Genoa, the Chamber could still exercise its authority and decline to countenance the Governments sending delegates; but that in so doing, the Chamber should appreciate the responsibility thereby assumed by them.

M. André Tardieu expressed his intention to vote for the proposal to send delegates to Genoa.

Expressed criticism of the present Government (Poincaré) for following too closely the lead of Briand's lately deposed Government.

His main point was an exhortation to Poincaré to be more firm and more aggressive in upholding the rights of France as set forth in the Treaty of Versailles and in subsequent instruments.

(Tardieu was a delegate to the Paris Conference that drew up the Treaty of Versailles and is very ardent in holding out for the execution of its provisions.)

Deputies of the Left.

Communists sought to gain from the Government and the Chamber recognition of the Soviet Government in Russia.

They are not disposed to be content with more modest propositions, looking solely for resumption of trade relations without recognition.

M. Poincaré testified to the opinion that his cabinet did not feel in any way impressed by any comments on Briand and his cabinet.

That he, himself, far from having sought the defeat of the Genoa Conference, had made proposals to the Allies as to a more carefully defined agenda, seeking thereby the more certainly to assure its success within the limits of that agenda.

That he was anxious to see France take a rightful part in the great work of the reconstruction of Europe.

That this was aside from the Franco-British pact, the conclusion of which was interrupted by Briand's resignation in January.

That the reconstruction of France was ever uppermost in his mind.

That he felt himself above party politics in pursuing those policies of the Briand cabinet that he believed to be for the welfare of France.

That he could not accept proposals to recognize the Soviet Government without full guarantees as to the payment of pre-war debts and demonstration of good faith on the part of that Government, though he was forced by the facts to conclude that France's commercial interests should be admitted to Russia along with those of other countries rather than lose any opportunity that might be offered to others.

That any attempt in the Genoa Conference to revise the Treaty of Versailles or to reduce the reparation sums now due France would result in immediate withdrawal of French delegates from the conference.

M. Poincaré concluded: "I have thought and said from the moment when, at Cannes, France joined in the invitation for the conference at Genoa and put her signature to those invitations that we should not go to Genoa as a silent partner and sulky, but that we should go there in all frankness and loyalty with the view of collaborating to the best of our ability in a work which is not without its risks and dangers, but which may be profitable if we work in good faith with our allies—a work if not bearing upon the whole world at least, nearly so, lending to it the collaboration of French genius.

"I am asked to go to Genoa after having in a measure disapproved the policy of my honorable predecessors, and I am reproached with having sought in this discussion to follow in some measure the former cabinet. Let me say most sincerely that this is the least of my cares. Without regard to the internal politics of the situation, I only wish to see France herself, her interests, and her rights firmly defended before the entire world at the conference at Genoa.

"Before the intervention of the Hon. M. Tardieu, M. de Bandry d'Asson took the floor to oppose in some measure the policy of reparation and the policy of the conference of Genoa, and I wish he would permit me to say to him that I do not in any way understand the contradiction which he sought to establish between the two ideas. The policy of the conference at Genoa is, on the contrary, particularly reconcilable with our rights to reparations and with the scrupulous respect of our treaties."

Here Briand intervened to say: "It is evident."

M. Poincaré continued: "Otherwise I would not go to Genoa. I consider, as M. Tardieu said a moment ago, that the first condition for the essential restoration of Europe is first and above all the restoration of France. What parallel, then, what comparison, should we establish between the situation of Germany, unhappy as

she is, and the situation of France, which has been invaded and ravaged?

"These are the unhappy facts that we require to be of first consideration at the conference of Genoa. We ask, before everything else, that France be considered, that her right to reparation be not touched upon, and when our rights have been respected we will collaborate in all sincerity and to the best of our ability in the restoration of the other powers." [Applause from all parts of the house.]

The following is the wording of the resolution of approval:

> The Chamber, approving the declarations of the Government and confident that it will assure at the conference at Genoa the safety and the rights and interests of France under the condition and the guarantee provided in the memorandum of the French Government of the 31st of January and rejecting all change thereto. Passed to the order of the day.

This resolution was carried by a vote of 465 to 72. There are 605 members in the Chamber (number decreased by 21 vacant seats). There were 31 absent on leave. There were 27 who did not vote. Of the 72 members voting in opposition the classification is as follows: 15 Communists, 52 Socialists, 4 Radicals and Radical Socialists, and 1 Action Republican and Socialist.

In connection with M. Briand's defense of his policy in Washington, as noted in paragraph 2 above, it is thought pertinent to add here a few remarks on the discussion recently engaged in by the French press.

While this discussion has seemed to have a fairly prominent place in the French press of late, there would appear to be in it a very large element of internal politics.

M. Tardieu writes a daily editorial in the Echo Nationale. Some of these have been attacks on Briand, based on the results of the Washington conference, and as a handle for these attacks he has used the matter of the tonnage basis allocated to France at Washington. (Be it noted in par. 1 of this report that Tardieu is thought to aspire to the premiership.)

On the other hand, Stephane Lauzanne, in the "Matin," has defended the French delegation at Washington and done a great deal to counteract Tardieu's articles.

In the discussion reported above Tardieu sought to make capital of the lack of consideration shown Sarraut and the French delegates in Washington. In open session of the Chamber he expressed the wish that all members of the Chamber could have heard Sarraut's report to the foreign affairs committee in private session.

However, Briand's defense of the outcome of the Washington conference, as given in paragraph 2 of this report, seems to have been accepted.

There is the further undeniable fact, not only known by the French statesmen, but the French public, that the funds are not available and will not be available for long years for going into extensive naval construction.

FRENCH POSTER.

26 April, 1922.

[Following is a translation of a large poster which is being attached to billboards in the city of Paris at this time.

It is of interest as giving the attitude of the Monarchist Party in support of France at Genoa and the profession of that party's readiness to carry on the Government as a monarchy.

While there is no thought that the Republic of France will ever become a monarchy, still the circulation of this poster is of interest.]

To Avoid War.

Frenchmen!

By the proclamation of the German-Russian alliance in the full pacifist Conference of Genoa, the French can see in what manner have run and are running the events.

In the past, duplicity!

In the future, butchery!

The absurd treaty of Versailles, by which humanitarian ideas a la mode have deprived us of the fruits of a difficult victory, should have been revised to obtain for us firm guaranties for substantial pledges. Attempts have been made to weaken it and to soften it; no more punishment against the culpables; no more productive delays. One day we make to Germany a present of 12 billions; another day the coal which she should give us free is paid for doubly in order to please the English! Soon this credit, so weakly valued and payable in 20, 30, and 35 years, is reduced by more than 40 per cent; and strange to say, the more we give in the more lies are said about us, not only among the enemy but among our Allies and associates.

When they call upon humanity and peace, our Allies, like the enemy, play the game to their own interest. But we do not play ours, and we must pay the cost of the comedy.

The republican politicians, traitors or profiteers, like Aristide Briand and Philippe Berthelot, have enriched themselves only by impoverishing the country. They consented at Washington to the suppression of our navy. Their socialistic accomplices were in the mood to arrange for the end of our army, when the thunder stroke of Tchitcherin and Rathenau has torn aside the lying veil of international pacifism, and here is what suddenly appears:

Sixty millions of Boches will combine with 140 millions of Asiatics of all races and every language; the immense reserve of man power of Russia will be absorbed into the German organization; there will be war. There will be invasions; killing, and ravaging, combined with the horrors of revolution—a Jewish conquest and terrible vengeance.

Frenchmen!

You have not wanted war; you have with all your hearts wished to abolish it, avoid it, or retard it. But this war comes toward you. To put you to sleep under the knife, traitors will say to you that there is no danger. But the danger comes; it increases every hour that you let it go; but whether you wish it or not, the war is here.

It is necessary to prevent this war.

It is necessary to prevent it at any price.

It is necessary to prevent it, as one would prevent any crime which is being arranged, by seizing and disarming in time the criminals who wish to accomplish it.

There is still time to do it. We have the strongest military organization in the world. We have made heavy sacrifices to maintain it, in order to insure our safety and to prevent war. Let our army then play its part for protection and peace! Germany is under our guns; we can strike her powerless before a single one of her wicked plans can be carried out.

It is necessary to go into Germany.

It is necessary to go into her cities to destroy the "execrable unity" of her Imperial Republic; to organize throughout all her territory practical means of collecting the amount of our reparations. If we do not do this police work, dividing and filling with intimidation the enemy, it is the enemy who will come into our homes; we will be reduced to defending ourselves, and if, as in 1918, we get out of it—which is by no means sure—how many millions of our dead must we pay again for our safety?

This uncertainty can last no longer!

Let us demand of the Government that it apply to this imminent war the only remedy which can be considered—a rapid, well-ordered, entirely followed-up action, setting to work the means of which history has showed the efficacy. The traditional policy of France toward Germany saved her formerly from these great invasions which the century of the revolution has multiplied.

If the Republic is incapable of foreseeing and acting for the fatherland—ah, well! let her give up. The Monarchy will accept the heritage; the men, the leaders, are ready.

In every way, Royalists and Republicans, all patriots agree: Action. Vive la France!

FRENCH INDUSTRIAL MOBILIZATION COMMISSION.

25 April, 1922.

The Ministry of War and the Undersecretary of State for Aeronautics have together issued the following order under date of January 10, 1922:

There is created in the Ministry of War an Industrial Mobilization Commission (Commission Consultative des Fabrications de Guerre a la Mobilization). This Commission gives its advice on all matters, submitted through the Ministry of War, touching on war manufacturing upon mobilization, especially—

(*a*) The distribution of war contracts among existing factories.

(*b*) The study of the transformation of existing factories and the creation of new factories with a view to manufacturing war products.

(*c*) Evaluation of imports to be envisaged and means for realizing such importations.

The commission further can be consulted on such questions of legislative nature as may arise in the course of the investigation of what arrangements should be made to provide an industrial mobilization.

The commission is presided over by the Inspector General of Industrial Mobilization (General Inspecteur des Fabrications de Guerre a la Mobilization). The membership of the commission includes:

(*a*) Civilians chosen from among the heads of various industries.

(*b*) The civilian director of aeronautic manufactures (he is an official of the bureau of the Undersecretary of State for Aeronautics).

(*c*) Military members.

The civilian members representing other than aeronautic industries are appointed by the Minister of War. Representatives of aeronautic industries are appointed by the Undersecretary of State for Aeronautics.

Membership of civilian members lasts one year but is renewable.

The military members include: (1) A military engineer of powders and explosives; (2) an official of the intendance (quartermaster) service; (3) two officers of the general inspection of industrial mobilization (Inspection Generale des Fabrications de Guerre a la Mobilization), one of whom acts as its secretary. (The general inspection of industrial mobilization is a bureau already in existence, which is entirely other than this industrial mobilization commission.)

The services of the members of the commission are rendered gratuitously.

The commission is divided into subcommissions corresponding to the principal branches of industry.

The commission and its subcommissions are convened at the call of its president.

The president of the commission may summon before either the commission or any of the subcommissions such persons and civil functionaries or such officers whose expert advice may appear to be of use in the deliberations.

MONSIEUR POINCARÉ ON THE GENOA CONFERENCE.

24 April, 1922.

M. Poincaré made a long, carefully phased, and every emphatic statement of his Government's foreign policy this morning at Bar-le-Duc, where he presided at the opening session of the Council General of the Meuse.

Speaking to an audience of "the French of the frontier" whose country had been ravaged, he declared that, though the cost of the war had to be borne by the victorious nations, the cost of repairing the actual damage done and the cost of pensions had to be paid by the enemy. The treaty of Versailles also prescribed that Germany "should be disarmed and definitely reduced to military impotence." "If these clauses had been regularly applied, France would have declared herself satisfied," said M. Poincaré.

The Prime Minister ridiculed the accusations that France is imperialistic and anxious for conquests. "I do not know a single French politician who has ever dreamed of territorial annexations," said he, adding, "All we ask for to-day is the execution of the treaty." He warned his hearers that "it is not by precipitate action and by taking steps without reflection that we shall obtain the execution of the treaty. It can only be by persevering and methodical action. But we must in the end obtain it. It is the question of the peace of Europe, of our national prosperity, of our future."

M. Poincaré referred for a moment to the German-Bolshevist treaty as a manifestation in the light of day of the sympathies between the Germans and bolshevists which had long been developing in the shadows, and used this treaty as a proof that the cabinet was right to insist on 18 months' military service. He mentioned the German police formations, composed of veteran noncommissioned officers "ready to be transformed overnight into military cadres." "It all looked," he said, "as if the Pan-Germans were on the lookout for an occasion to foment trouble sooner or later in the marches of the East and to retake by force the Polish regions taken from Germany by the treaty of Versailles." The work of the interallied commission was far from completion, and "it will certainly be indispensable that the Allies should maintain in Germany means of effective control over air organization, military organizations, and armaments." M. Poincaré added that "we desire with all our hearts the day when we can ourselves disarm, but Germany must first be genuinely and completely disarmed."

Allies' Right and Duty.

He next turned to May 31, the date on which Germany must accept or reject the conditions laid down by the reparation commission, and said that in the case of German default "the Allies will have the right, and consequently the duty, in order to protect their interests, to take measures which beyond doubt it would be infinitely desirable to adopt and to apply in common accord between them, but which by the terms of the treaty could in case of necessity be taken by each interested nation and Germany by the treaty of Versailles would be obliged not to regard them as acts of war. We wish ar-

dently to maintain on this capital occasion the cooperation of all the Allies, but we will defend the French cause in complete independence, and we will not give up one of the weapons which the treaty gives us."

Then M. Poincaré turned to Genoa. The treaty between the Germans and the bolshevists, whatever its secret clauses might be, "in any case sets the seal on a rapprochement which may become tomorrow a direct menace to Poland and an indirect menace to us." French opinion would have understood the dissolution of the conference as the result of the action of the Germans and bolshevists, but the Allies were indulgent, and the French delegation, "anxious to show once more its cooperation, associated itself with the indulgent motion addressed to Germany."

France publicly showed herself solid with the other powers represented at Genoa, but, "having given this new proof of our pacific spirit and our conciliatory intentions, we remain more firmly attached than ever to the ideas which the cabinet has explained before Parliament and which remain our law. If the French delegation can not make them triumph at Genoa, we shall regretfully be unable to continue our cooperation at a conference of which we shall at least have sought to assure the success. Whatever may from henceforth be the attitude of Germany and Russia, we have before us a political situation which is of a nature to compromise and perhaps to upset the equilibrium of Europe, and which it is no longer possible to control by the aid of simple economic or financial formulas, nor even by means of great international conferences at which sit side by side the representatives of every human tongue. It is neither, alas, consortiums of bankers nor recommendations, however wise, on questions of exchange or transports which will restore on a firm basis the peace of Europe."

A great part of the German people, M. Poincaré went on to explain, are filled with the "idée-fixé," which develops their hopes of revenge, and the bolshevists have another "idée-fixé" which gives them the illusion of bringing a new gospel to the world. Against these forces other moral forces must be employed.

The Fate of Genoa.

"We will remain at Genoa only on condition that there is no concession to Germany or to Soviet Russia and that we hold firm to the terms of our memorandum. But, whatever happens to the conference, the Allies will have to examine without delay the new fact created by the German-Russian treaty, its effects on the treaty of Versailles, and its effects on the future and the peace of Europe. It certainly puts before the Allies one of the most formidable problems they have had before them since the armistice. Let us hope

they will resolve the problem in concord and union by acting on those great principles for which they fought—right, liberty, and spirit of modern civilization."

Before he concluded with an appeal to Frenchmen to sink their differences and stand together at this difficult time, M. Poincaré once more declared, "We are determined to keep what has been given us by a treaty for which our heroes paid with their blood."

M. Poincaré's important speech is well received in Paris, and it is to be expected that it will have a consolidating effect on public opinion, which during the last few days has tended to grow ever more uneasy owing to uncertainty as to where exactly the French Government stands. Its appeal to the union of all parties is doubtless directed also to the strengthening of his own position, which is subject daily to violent attacks from a number of different directions.

In the opinion of the Temps, his is a moderate and well-reasoned speech, which clearly sets forth and firmly maintains France's rights and justly defends her interests without saying anything injurious to the truth or to the legitimate interests of other nations—"Our due, nothing but our due, all our due," in the words of the strong, simple formula pronounced one day by Raoul Péret, president of the Chamber."

FRENCH EDUCATION.

20 March, 1922.

Education in France is compulsory up to the age of 13, but this compulsion is evaded to a certain extent, for each year a considerable number of men who can not read or write are incorporated in the army, where their instruction is undertaken.

Education in France is less universal than in the United States and is less actively pursued throughout all classés. The upper classes are better educated than in the United States and the lower classes less well instructed. The system which has for its object the procurement of scholastic degrees and entrance into and graduation from the various universities is marked with great rigidity and uniformity of prescriptions, all of those being dictated by the government through the ministry of public instruction.

The average Frenchman who has taken his degree, whether he be a business man, a professional man, an artist, or a man of leisure, is a more highly cultivated and a more accurately instructed man than the corresponding person in America or Great Britain.

In the lower classes attendance at school generally ends when the law allows it or very shortly afterwards, between the ages of 13 and 15. The children of peasants or working men when they arrive at 14 years of age generally get employment or assist their parents

in their labor and do not continue their studies. Night schools and summer schools and all the arrangements familiar in America for giving a higher education to young people obliged to work for their living are practically unknown in France.

Scientific schools and technical schools of applied science for the production of scientific experts for commercial purposes is less developed than in America or Germany, but efforts are constantly directed toward the improvement of this condition.

The women as a class are much less well educated than the men, and their instruction touches upon very different subjects. French women as a body are less highly educated than American women of corresponding classes. The distinction between the education of the sexes as to methods, subjects, and amount is greater in France than in America. Instruction in science and mathematics is not usual among French women, but their instruction in art and literature is more highly developed.

The system of education in France, like all French institutions, is the outgrowth of a long tradition very slowly adapting itself to the march of modern conditions. The stratification of French society is reflected in the instruction desired and furnished the various classes of its citizens. The great mass of peasants, which constitute the conservative backbone of France's population and institutions, have little ambition for higher learning. Their methods of husbandry draw with patient labor greater riches from the soil, and they very slowly respond to the greater productivity resulting from modern methods and machinery.

The agricultural population is not given to reading scientific works or magazines devoted to agricultural matters, as is the case with our farmers. The peasant practices what he learned from his father and expects his children to learn from him. He sends his child to school, but is generally satisfied when he has finished his obligatory primary instruction at about the age of 14, when he is glad to take him to help in the fields and in the barnyard. The State endeavors to improve the husbandman's instruction in agricultural matters, but there is no such intensive education along these lines as exists in the prosperous States of America.

What is said above concerning the peasant is true, with evident modifications and reductions, of the working classes in the cities and the small shopkeepers of towns and villages. Due to rubbing against city life, ambitions are more frequently awakened in these classes, and a desire for a superior education is occasionally observed; but, as a rule, most of the lower classes in France seem content to do their duty in that walk of life to which it has pleased God to call them, as the prayer book says, and they do not see in a high-school education a door opening upon wealth and happiness. These classes are just

as keen to improve their lot and increase their incomes as are Americans, but they seem more inclined to seek it by diligence and excellence in their own trades rather than by book learning. They envy people who have more money than they, but to a much less extent they envy people who have a better education.

The lesser bourgeoisie, the lower middle classes, in France, as in other countries, see in a good education wider opportunities for improving their condition in life, both socially and economically, and it is here that advantage is most widely taken of the opportunities for free education or sacrifices made to obtain instruction which costs money.

The wealthy people and the aristocracy have a sincere respect for learning and an active desire to see their children cultivate it to the highest degree. In these classes there is found a keen interest in intellectual pursuits and a widespread taste for art, literature, and science, and a comprehension of them.

The intellectual classes—the producers of ideas, the professors, scientists, artists, writers, and professional men—come in a large measure from the middle classes. These men and their work are admired, but they do not mix to a very great extent with the aristocracy of blood or finance nor do they seek to do so.

The professors of the universities and of the best high schools are men of great learning and ability but the school teachers available for primary and secondary instruction are not of a high order of intelligence. They are very badly paid and the trade is unattractive. When most of this instruction was confined to Catholic priests the teaching personnel had a somewhat wider culture, but even then, as is the case now, the lower clergy presented many specimens not only of narrowness but of plain ignorance.

INTERVIEW WITH GERMAN SUBMARINE OFFICERS.

2 May, 1922.

The submarine officers of the German Admiralty have discussed the question of net-cutting devices for submarines and mines. These officers stated that the mechanical net-cutting devices had been used in the German Navy during the war with much success. As a general proposition, it was difficult, however, to cut through submarine nets in all cases where mines were attached to the net, as the work of cutting, unless rapidly carried out, might cause the submarine to explode the mine before cutting through the net. For this reason the electrical mine-cutting device was considered to be a particularly good solution of the problem provided the safety of the battery and vessel could be insured.

Experiments were conducted for the *U–52*, the *UB–9*, and *UB–60*. These experiments were continued until about September, 1918, before the device was reported ready for the "front."

German submarine officers state that one of the main difficulties regarding the use of submarines against armed vessels is the wake of the torpedo and the bubbles from the torpedo tube resulting from the discharge of the torpedo. The electrical torpedo had eliminated the first source of danger, but the range of the electrical torpedo, as developed for the German Navy, was only 1,500 yards. Longer ranges could be obtained by increasing the diameter of the torpedo to about 25 inches or more, but this was not feasible in the smaller-type submarines.

Experiments have been conducted in the German Navy for some time to eliminate the bubbles rising from the torpedo tube by the discharge of the torpedo. This was considered a grave source of danger to the submarine, and every possible means was used to eliminate the air from the tube or at least to prevent this air from rising to the surface in the form of bubbles. In this the Germans were partially successful, but the devices were not completely satisfactory nor were the bubbles entirely eliminated.

The submarine officers believe that the best chance of success lay in a device whereby the torpedo was discharged from the tube with a piston arrangement, while the torpedo tube was completely filled with water and freed from air. Such a device was not perfected by the German Navy.

The officer who commanded the submarines at Helgoland in 1916 urgently requested Admiral Scheer to permit the submarines to precede the fleet to the probable place of engagement between the British and German fleets, instead of taking position off the British coast and harbors, as directed. This request was refused by Admiral Scheer, who expected to obtain greater results from the submarines near the British bases. As results showed, the admiral's anticipations were not justified.

GERMAN BOMB SIGHTS.

27 March, 1922.

Bomb Sights.

The sample sight is still in possession of the Goerz Co., which concern owns the controlling patents, both German and foreign (United States). This sample is the only one known to be in existence although about 30 were built and delivered to the Austrian Navy for use in flying boats. The principle of the instrument is believed to be good by all officers, navy and army, who have seen the instrument demonstrated (on the ground). Consideration has been given to

arranging an aerial demonstration in Germany, but it is not practicable even at Coblenz. The Goerz Co. is not willing to consider selling the sample instrument unless and until it can be demonstrated by some one familiar with it. They are not able under existing restrictions to manufacture for demonstration a sample of the later model. However, a good idea of the possibilities of the instrument, either with or without gyro stabilization, can be got from a demonstration of the existing instrument. It has been stated that three skilled pilots using this sight dropped five bombs, each of the type later described, from 4,000 meters at a target 100 by 100 meters with a central square 50 by 50 meters. All 15 bombs were hits within the smaller square.

The Goerz Co. would no doubt be willing to discuss a proposition to dispose of their rights on a royalty basis or for a fixed sum, but only after the sample has been demonstrated.

Bombs.

It is claimed that there has been developed and used successfully an aero bomb which is stable without fins. With such a bomb, more accurate trajectories and increased striking velocities (of the order of 250–280 m/sec.) are possible.

The bomb is spindle-shaped. Maximum diameter is about one-ninth the length. There is no reverse curvature. The angle of entrance is about twice the tail angle.

GERMAN MOTOR FUEL.

6 April, 1922.

Considering that the quantities of benzine which were manufactured from mineral oils according to ordinary processes even before the war were quite insufficient to satisfy the enormous demand and that all kinds of substitutes and "watering" materials were used, after the outbreak of the war when Germany was shut off entirely from the rest of the world and was thrown absolutely on her own resources, she was obliged to find some substitute so that the army automobile service would not have to stop altogether on account of the lack of fuel. A really effective substitute, however, could not be found. Such as was produced did not serve for the high-powered cars, and the evil-smelling fumes of the war benzine proved most troublesome and unpleasant.

The German chemists did not rest, but continued their research work along the lines which seemed to promise them the best success in their quest for an artificial substitute for the expensive motor fuel. Experiments showed Doctor Bergius, director of the Goldschmidt Co. in Essen, that it is possible to manufacture benzine and

oils which may be used in a similar way out of the oils, oil residues, petroleum pitch, and coal containing a large amount of asphalt. For this purpose Doctor Bergius heated the above-mentioned initial products and treated them with hydrogen under a pressure of from 100 to 200 atmospheres. After this process these products had a chemical reciprocal action with the tar products. Naturally carrying out this process on a large scale presented many difficulties. However, it has now been possible to so arrange the manufacturing process that the first plant of this kind has been set up at Mannheim-Rheingau and put in operation. If the extensive hopes attached to this process are in any way fulfilled, then the question of the lack of fuel will be done away with for all time, and benzine will always be procurable at a moderate price.

GERMAN WEATHER REPORTS FOR FLIERS.

Source: An article by A. Schmauss.

6 April, 1922.

The necessity of meteorological advice to the commercial flier is universally acknowledged. Even in the war, where little heed was paid to human life and material as compared to the conditions of peace time, a widespread weather service was organized for the safety of the air service. It has acquired particular importance with the introduction of air traffic.

As it is customary that traffic lines have to bear all the expenses necessitated for their safety, the air companies hold that the weather stations on aerodromes should be supported by the State or the community to which the aerodrome belongs. We do not wish to discuss this controversy here, and wish only to insist on the urgency of meteorological advice being supplied upon the aerodrome. It will hardly enhance the feeling of safety on the part of the pilot if, instead of a line forecast issued hours ago at Lindenberg, he receives the advice of a meteorological expert familiar with the details of the line, the latter one being able to inquire and receive by means of the Lindenberg code special information from particularly perilous portions of the line shortly before starting time—a detail of special importance if this starting time had to be suddenly changed. As the flight is performed by intervals, meteorological advice should also be given accordingly. Practicians may decide to which system they like to give preference; according to my war experience, to me the answer seems to be plain.

Naturally there is no need that such weather stations should do service exclusively for air traffic; if situated in university towns they can well be annexed to the universities, thus enabling the latter to add to their lectures on meteorology the practice necessary, and those

weather stations might also in the quality of local centers of forecast furnish weather information and such like to the papers.

One more important question must be mentioned. How far should the pilot take the weather reports into consideration? First of all, it ought to be made a legal regulation that the pilot is obliged to personally read the weather reports at hand at every aviation field he touches. Practical America has understood it; the insurance companies there do not pay any premiums whenever an accident is to be attributed to the nonheeding of a weather report. To what extent the pilot will give heed to this report is naturally dependent on the degree of personal confidence he places in the meteorologist. I can not approve of an air-traffic company saying expressly in their report that on 16 days, for which the weather service had set the forecast "no flying weather," they have fully performed their regular flights. There ought to be a difference made between flying for the sake of sport and the working of a company to whom passengers confide themselves against a remuneration.

When selecting pilots, their meteorological fitness should be taken just as well into account as their technical ability. It should not be tolerated that a pilot should only be acquainted with his machine; he ought also to be familiar with the peculiar properties of his fairway if the meteorological advice is supposed to be of real value.

GERMAN CONVERSION OF WAR VESSELS.

2 March, 1922.

In Germany, as well as in foreign countries, especially in America, old war vessels which can no longer be used as such have been converted into merchantmen and as a rule equipped with oil motors for propulsion. Such constructions have also been undertaken in the German Navy. For instance, the armored coastal cruiser *Odin* has been converted this year into a motor freight ship by the Deutschen Werke, A. G. Werk Rüstringen, for the shipping company, Arnold Bernstein, Hamburg, and after a very satisfactory trial trip was delivered over on January 26. The ship's length amounts to 79.10 meters, the width 15.45 meters. As an armored vessel the ship had a draft of 5.3 meters and a displacement of 4,150 tons. All installations and fittings for military purposes were removed. All the decks above and below the armored deck (the present main deck), with the exception of a part of the forecastle, bridge, and poop, were taken away, two diagonal bulkheads and the interior water-tight wing passage bulkhead were taken out, and a diagonal bulkhead (one) was altered, or, rather, its location was changed. After the recon-

struction the draft at full load is 4.51 meters, with a displacement of 3,430 tons. The capacity is 2,000 tons. The stability of the ship is very great on account of its form, and especially fits it to accommodate deck cargo, for which reason it is intended to serve for the transportation of locomotives, and especially those locomotives and tenders being constructed in Germany for the order of Russia. It will accommodate nine locomotives and nine tenders. Besides this, the vessel can also take on a cargo of 1,000 tons. As a war vessel, the *Odin* had two triple-expansion engines of a total horsepower of 5,500, which gave the vessel a speed of 15 nautical miles. The present machinery consists of two six-cylinder four-cycle Diesel motors, Augsburg-Nürnburg factory type. The cylinders have a diameter of 350 millimeters and a boss of 350 millimeters. The effective performance is 400 horsepower, with a total 350 revolutions, giving a speed of 10 nautical miles. The especially efficient air compressors for the starting compressed air make it possible to use compressed air during the trip for the operation of the rudder machinery, the whistle, and the occasional operation of bilge and motor oil pumps. There is an auxiliary boiler for the operation of the auxiliary engine and the heating. The ship is fitted with wireless and an electric-lighting plant. The current is supplied from a continuous-current shunt dynamo driven by a glow-head motor. The entire machinery parts, including the coal supply for the auxiliary boiler, a fifth of the motor-oil supply, all of the lubricating oil and water, as well as the machinery supplies, are located in the engine room, which has been shortened from its former size to the extent of one and one-half frames. The ship has also made several trips with cargo during favorable and unfavorable weather and has proven most satisfactory. However, it is not only obsolete war vessels which have been converted into merchant vessels. It is now the new, modern war vessels destined for destruction under the terms of the peace treaty so as to make them useful for peaceful purposes.

An interesting example of this is the motor tank ship *Ostpreussen*. The *Ostpreussen*, which made her trial trip in the middle of July, was built at the Germania Werke for the Hugo Stinnes Co., of Hamburg. The notable point about this vessel is that it has been constructed out of the two interior bodies of submarine cruisers. These pressure bodies has a length of 77 meters and a diameter of 5.75 meters. They are arranged parallel through a joining construction and are fitted with deck erections, bow, and afterbody, so that a good ship's form is attained. The length of the *Ostpreussen* is 87.4 meters, the width 12.3 meters, and the molded depth is 7.6 meters. The ship is destined for the transport of oil and has a cargo capacity of 3,000 tons. There are two submarine Diesel motors of 700 horse-

power each for the operation of the two propellers. The auxiliary engines are driven largely by electric power. There is a small auxiliary boiler for the operation of the anchor and hauling winches.

GERMAN PAINT.

22 March, 1922.

Ratjen's patent paint is used very extensively in Germany for the protection of ship's bottoms, but it is not altogether satisfactory.

Professor Hentschel examined a number of steamers and sailing vessels at the Blohm & Voss Works, in Hamburg. There were 48 of these vessels in all which were undergoing cleaning and scraping on account of the growth on the bottoms. Among these were fire ships belonging to the city of Hamburg and a number of buoys. The purpose of this examination was purely scientific in connection with the problem of the plant and animal life in the water and in order to supply the zoological museum in Hamburg with data and material. Professor Hentschel pointed out that in so far as regards the growth on the bottom of ships the nature of the ship itself had a predominant influence, together with its movement. Just under the water line there usually comes a green zone of plants. These are the tube or hose-shaped green alga (sea wrack), called by sailors grass. This green zone is usually about 1 meter in width, and in the spring and summer reaches ordinarily to the rolling chock. It extends downward to a very great degree, which does not depend altogether on the daylight.

In the lower zones and on the actual bottom itself the growth is almost entirely animal. The light-green grass on the bottom of the ship is actually the hydro-polyp of the Tabularia family. Among the various animal growths the barnacle plays by far the principal rôle. (In Germany the barnacles are called mussels by the sailors and dock workers.) They are really a form of crab inclosed in a shell, and this crab derives its nourishment from the water by means of its hind legs. The lantern-shell or long-neck mussel is very closely related to this crab. In the case of ships which lie for a long time in the northern waters of Europe the sea mussel forms the principal growth; on the lightship *Elbe I* the sea mussel and the sea acorn formed the main growth. Of the lower forms of this animal life there are also the tube or shell worms with the white chalk shells and the moss polyps. All these animals form groups or so-called communities in which one and then the other predominates.

While the upper green zone of the ship is fairly regular in form, those zones covered by animal growth often evince great differences and irregularities. The stern of the vessel has an especially thick growth, mostly of longnecks, with a lower zone of hydropolyps as

a certain protection against the current. The bow of the vessel, the bottom, and the sides all exhibit the same growth. The sea acorns increase from the bow to the stern, because the larger ones are torn away from the bow. Even the propeller is covered with animal and plant growth. However, the outer parts of the blades are often pretty smooth.

On the lower part of the rolling chock the growth is fairly well protected. This is especially so behind the lappings of the plates and a few centimeters beyond. There is also an apparent protection here against the current. The same thing occurs in swellings on the walls of the ship, or, as often happens, although it should not be the case, directly in front of the propeller in the territory of the "dead water." Outside of the movement of the water, other factors may enter into this which are not yet explained.

The paint used has a special significance in connection with the question of growth—a fact which has long been recognized. It is true this has never been the subject of a really systematic investigation, but observations have been made from time to time. On the lightship *Elbe I*, in a part which was painted with an especially good paint, the mussels were all very small, and were attached very loosely, mainly because the sea acorns to which they were attached were very scarce. On two West African steamers the growth of sea acorns varied considerably on account of the different paints employed. Wherever the color had cracked and peeled off the growth was especially thick. In two instances the paint was destroyed through the trickling down from the deck of some substance while the vessel was in dock. In these vertical strips the growth was again very thick. Various paint mixtures have a great influence on the growth; some restrict the growth considerably; others not so much. The hard paints are only effective in the case of the microscopic growths, but have absolutely no effect against the attachment and growth of the animals themselves. Unfortunately scientific examinations concerning the initial growths on chemically well-known paint compositions have not been undertaken, although practice has attained some very significant results in this regard.

The waters in which the vessel travels also play a very important part in the question—not so much the ocean itself as the harbor waters. Latitude also has great influence. In the Tropics the sea acorns are most numerous; also the quantity of salt contained in the water is very important—for instance, the North Atlantic with its many river mouths and harbors. In West Africa, for example, during the rainy season the harbors contain brack water, while in the dry season the water is salty. In the waters of West Africa and those on the western coast of South America the growth of the sea acorn

is especially remarkable. Inasmuch as both coasts are rich in swimming plants and animals, the good nourishment may be the cause of the rapid growth in contrast to the eastern coast.

GERMAN STEAMSHIP "CAP POLONIO" ARRIVES ARGENTINA.

17 March, 1922.

The maiden trip of the Hamburg South American Steamship *Cap Polonio* has been extensively advertised in Buenos Aires, and the general impression given to the public has been that she is the largest and finest steamer afloat. The ship was thrown open to inspection, and crowds visited her daily.

The *Cap Polonio* is 30,000 tons displacement, and is a well-appointed and well-equipped ship. The only features of interest are the blister compartments, running the full length of the ship, and the automatic helmsman device. It is said that the stability of the ship proved unsatisfactory and that blisters for water ballast had to be added.

There is every appearance of discontent and inefficiency among the personnel. It is said that small pay is responsible for this. It seems apparent that the service on board will not be up to the pre-war standard.

PROBLEM OF UNEMPLOYED FILIPINOS IN HAWAII.

31 March, 1922.

The Hawaiian Sugar Planters' Association have continued to import a great number of Filipinos for employment as laborers on the plantations. The last census figures available—1920—give the total number of Filipinos in the Territory as 21,031. It is said that there are fully 25,000 in the islands now. The number employed on the plantations as of June 30, 1921, is 12,271. The gradual resumption of normal labor conditions may have increased this last number in the last six months. It is claimed that the present importation of Filipino labor averages 500 monthly.

The disproportion between the number imported and the number employed indicates the inability of the plantations to hold their labor, and the flocking of the Filipinos into the city of Honolulu and the towns of Wailuku and Hilo constitutes a serious social menace which is being commented upon daily by the newspapers.

The presence of unemployed Filipinos in the congested districts of this city and the larger towns on the other islands is a very bad sociological condition, and from among these Filipinos a great many petty criminals are recruited, and the local jails, asylums, hospitals, and other welfare institutions are crowded with a disproportionate number of this race.

INCREASING ANTISEMITIC FEELING IN HUNGARY.

Budapest, March, 1922.

Jews in Hungary did not play an important rôle in public life till about the eighties of the former century. At that time ideas about the equality of the rights of all confessions became liberal, and since then the Jews have succeeded, through their intelligence, activity and persistence, to secure an ever increasing influence on public matters. In a comparatively short time they got the guidance of trade and of financial matters to a great extent in their hands, and many of them acquired large fortunes and wealth.

The Hungarian aristocracy had scarcely any dealings with Jews and kept aloof from them, but it was otherwise with the so-called "gentry." These people, who were mostly land-owners of middle-sized properties, liked to live very well and spent more than they could afford. Thus they became indebted and mortgaged their properties, and Jews, who were just working up their ways, took their opportunity and bought such properties at very advantageous prices. Although their ways are easily understood, they still were an incentive to make them very unpopular. The peasants never have liked the Jews, but, being rather indolent, did not object that in almost every village Jews settled down as innkeepers and tradesmen, because these very cleverly made themselves indispensable for all their wants. Governments mostly patronized Jewish capitalists, because they wanted their financial advice and their services, for which many Jews were ennobled and got titles and orders in return.

Strengthened through rapid success, Jews soon became arrogant, and thus caused much anger and often hatred all over the country.

The great war found Hungarian Jews at the climax of their power. All their enterprises were flourishing and they had the leadership of financial matters.

During the war Jews did not distinguish themselves, and the dislike they had to face in peace time increased, as very many of them knew how to withdraw from military service and to stay at home profiteering.

In the revolution and in bolshevism a very great many Jews took part, but excepting a few cases they all belonged to the mob and rabble. In fact, Jews organized this subversive movement, and types of them emerged whose vileness and infamy have their equals but among Russian bolshevists. Their leaders were almost all Jews and very often criminals and jailbirds. No wonder that after the breakdown of bolshevism Jews were prosecuted indiscriminately and that often innocent people were hurt when the crimes which had been committed became known and passions were roused.

Hatred has cooled down now very much, but sometimes small incidents suffice to revive it. Chauvinists consider all Jews as enemies of the country.

Jewish capitalists are to-day again leading personalities in matters of business and are conservative and mostly "Karlists." They think that in case of the return of the Hapsburg dynasty they would enjoy once more all their benefits they had in the former monarchy. It is said that Jewish capitalists have provided the financial means for the "putsch" of King Charles in October last, but this has not been proved.

STATEMENT OF ADMIRAL KATO REGARDING THE PHILIPPINES.

14 April, 1922.

On March 19, 1922, Admiral Kato, the Minister of the Navy, is replying to interpellations in the Diet (House of Representatives) in regard to the limitation of Pacific fortifications, stated that the Philippines had menaced Japan, etc.

The Philippines had menaced Japan, so Japan desired the limitation of fortifications on those islands particularly. The Philippines was the only place where a powerful naval base, such as would constitute a serious menace to Japan, could be created. As for the Bonins and Amami Oshima, they would not make powerful naval bases, even if they were fortified. As Japan was anxious that the fortification of the Philippines should not be increased, he concluded that it would be very disadvantageous to Japan if his insistence on the inclusion of Hawaii caused friction.

Admiral Kato said that he did not think that everything arranged at the Washington conference was satisfactory to Japan. There were points where the treaties fell short of Japan's expectations, but no country got all that it wanted. On the whole, he believed that the conference was a success, seeing that so many important decisions had been reached in short space of time. In his opinion the way to maintain the peace of the Pacific was to observe faithfully the agreements that had been arrived at the Washington Conference.

STATEMENT OF ADMIRAL KATO REGARDING THE ARMS CONFERENCE.

14 April, 1922.

We are determined to strictly observe the agreements reached at the Washington Conference and carry them out not only to the letter, but in spirit as well. As a matter of fact there is no real opposition in Japan to the results of the

conference. The members of the Diet know that the Washington Conference was successful, and the attacks which have been made are merely for internal purposes.

Such was the declaration to a representative of the Japan Advertiser of Admiral Baron Kato, head of the Japanese delegation to the conference, in discussing the stand of Japan relative to the naval decisions reached at Washington. That Japan had in any way changed her attitude regarding the issues in the Pacific or taken any action toward readjusting the national defense plan was vigorously denied by the delegation chief.

"Reports that Japan's plans of national defense have been readjusted as a result of the Washington Conference are entirely without foundation, and the idea that the first line of defense will be from Hankow through Shantung and Harbin to Saghalien is ridiculous," the admiral reiterated when interviewed by a representative of the Japan Advertiser.

It is true there was a meeting of marshals and admirals of the fleet at which a report on the conference was submitted. The report received general approval and unqualified indorsement, but nothing else was considered and no other subject was mentioned at that meeting.

When questioned regarding the extra session of the Diet and reductions in the budget, the Admiral replied that whether the Government will convoke an extra session of the Diet has not been decided, but regardless of whether such a session is called the provisions of the treaties and agreements concluded at Washington will be carried out just the same. The navy budget, he said, is being worked on now.

"It must not be expected," he said, "that all the economies will be apparent at once or that the reductions will be apparent at once or that the reductions will be large. The effect will appear increasingly year by year and reductions will be made gradually. Increased cost of production must be allowed for and reduction of personnel may make national temporary expenditure necessary. These reductions in personnel will be made not suddenly but gradually.

"I have told members of the cabinet and other Government bodies repeatedly that prior to the Washington Conference, whether rightly or wrongly, there existed a war psychology and consequential war talk. The Washington Conference has dispersed these war clouds, and while this may be considered a by-product of the conference it is truly as important a result as any treaty or agreement reached there. It is our mutual duty to see that this mental attitude is maintained and bettered on both sides of the Pacific. No one doubts that the United States will fulfill her agreements, and it is unjust to Japan to presuppose we will not do likewise.

"I have been in Washington and now am back in Japan. I have brought back with me not only the agreements but the spirit in which those agreements were framed, and it is my intention that they shall be fulfilled and fully observed."

NAVAL CONFERENCE AT TOKYO.

28 April, 1922.

The naval general staff will call a meeting of the chiefs of staffs of the naval stations about 15 May, 1922, and besides the usual discussion of subjects relating to arrangements for dispatching armed forces and plans of action, etc., the chief of the naval general staff, Admiral Yamashita, will address them in regard to the reduction of the Japanese Navy to a 6-and-4 fleet as the result of the naval treaty. They will discuss defense plans.

The meeting of the chiefs of construction at the various navy yards will take place at the navy department on 22 May, 1922, to discuss construction problems arising out of the naval treaty.

These questions will include disposition of employees, scrapping of ships, etc.

FUTURE POLICY OF JAPANESE NAVY.

14 April, 1922.

Meeting of naval high officials was held at the minister's official residence on 6 April, 1922, to which the following officials attended: Fleet admirals, Toga, Inoue; military counselors, Higashi-Fushimi, Fushimi, junior, Shimamura, Nawa, Sadakichi Kato; port admirals, Yamaya, Murakami, Takarabe, Oguri; commander in chief of fleets, Tochinai, Suzaki; chief of general staff, Yamashita; vice chief of general staff, Abo, and heads of sections; vice minister, Ide; chiefs of bureaus: Horiuchi (military affairs), Shisa (accounts and supplies), Nakazato (warlike stores), Furukawa (personnel); chiefs of departments: Nomaguchi (education), Okada (matériel).

The minister and others gave their views regarding the following: (1) The proceedings of that part of Washington Conference relating naval limitation; (2) the effect the Japanese Navy will feel after the treaty goes into effect; (3) reduction of naval personnel due to naval limitation; (4) relief of men losing employment due to suspension of building of capital ships; (5) maintenance of industrial efficiency during naval holidays; (6) steps for carrying out naval treaty and scrapping of ships; (7) plans for readjusting naval administration in connection with naval reduction.

The fundamental points regarding ways and means for meeting the conditions brought about by naval limitation were brought up by the minister. After frank discussion the plans of the minister were approved.

With the reduction of the navy from an 8–8 to a 6–4 fleet it becomes imperative to further increase the efficiency. This must be accomplished by a more thorough training of the active fleet. The fuel allowance will be increased (to permit more cruising) from 50 days steaming to 60 days steaming. The appropriations for gun and torpedo practice and aviation bombing practice will be made larger. The unnecessarily large number of high ranking officers will be reduced by retirements.

Education will receive increased attention. The usual appropriation of 900,000 yen will be doubled, thus endeavoring to make up diminution and tonnage by securing greater efficiency.

The submarine, aviation, and navigation schools will be improved and enlarged.

The navy is trying to arrange so there will be no loss of employment by its men—that is, it is trying to bring this about by (1) work required for scrapping, (2) improvement in capital ships, (3) construction of five special service ships, (4) hastening of construction of auxiliary vessels.

EMPLOYMENT PROGRAM, JAPANESE FIRST FLEET (May to December, 1922).

Vessels of the first fleet (Admiral Tochinai, commander in chief) will disperse to their respective navy yards by the end of April to fill up their complements and take on fuel and stores.

By the end of May the entire fleet will reassemble in at Sasebo and then, basing on Terashima Suido, carrying out gun and torpedo practice for two months (June and July).

Early in August the first fleet will cruise in the Japan Sea and along the coasts of Korea and the Hokkaido.

From the middle of September they will begin preparations for the grand maneuvers to be held this autumn.

The customary maneuvers of the defense force of the Yokosuka Naval Station are scheduled for April 23, 24, 25. They will be held on the Gulf of Tokyo and Sagami Bay.

The ships taking part will be the *Yamashiro*, *Ikoma*, *Aso*, *Kitagami*, *Wakamiya* (airplane mother ship), and destroyer and submarine flotillas.

JAPANESE RADIO STATION IN YAP.

14 April, 1922.

The Japanese Government is to build a radio station in Yap so as to avoid the United States taking the advantage granted her in "Yap treaty." The expense is not included in the 1922 budget; but the work will go ahead, as it can be covered by special arrangement.

JAPANESE ACQUISITION OF PROPERTY ON BATUM ISLAND.

Source: Reliable.

1 April, 1922.

At the time of the government survey of Batam Island in 1919, a Japanese director and four employees and about 100 Chinese coolies were on the property. The director was a good-looking, superior man. speaks fluent English, and is spending a good deal of his time at Singapore. There was a small motor launch there. The buildings were poor wooden houses. The two properties were purchased by the Japanese as rubber plantations, but the soil is not especially good for rubber, and there are no other rubber plantations in the island. The property will not pay as a rubber plantation. The island was bought for some other purpose. Even small ships must anchor 2 miles off the coast.

Other property in this vicinity had some 20 Japanese on it (including some Japanese women). There was a very good pier for a landing place and the 6-fathom line runs close to the shore for some miles along the coast. There are good wooden houses and well-cut road (20 feet wide) with good bridges. A mountain on the property dominates the whole bay. The manager was an old gentleman who spoke English badly.

The Japanese had endeavored to secure leases of the Koerian Kang region, bordering on the bay south of that part of island, but failed in their attempt.

The British at Singapore are informed of the situation, and regard it with suspicion.

JAPANESE NAVAL ATTACHÉ TO CHILE.

15 March, 1922.

The following is a translation of an interview given out to the press by the Japanese naval attaché at Santiago, Lieutenant Commander Ikeda:

On being interviewed by the Concepcion newspaper on his arrival in that city during his pleasure trip to the south the naval attaché to the Japanese legation made the following statements:

"I have come to the south of Chile with the object of appreciating personally the beauties which it holds and which have been referred to me by travelers who have visited here.

"On Monday, 27th of February, I left Santiago for Chillan, which city I visited in order to become acquainted with the historic memories which exist there.

"The end of my trip will possibly be in the lake region, which I will visit even at a sacrifice of the short time which is left me to return to Santiago."

"How many days will you stay in our city?"

"On Monday I will go to Talcahuano to visit the chiefs of the naval station there, and directly afterwards to Valdivia in order to go on from that point to the south."

"And what do you think of our navy?"

"The Chilean Navy has always held my admiration, even before I came to know it closely. Its glories and the valor (gallantry) of its officials and sailors captivated me. Now that I have had occasion to see it from the inside, I am convinced that Chile possesses in her navy one of her greatest assets."

"And do you believe it possible that there will be an interchange of Chilean and Japanese officials?"

"According to my opinion, this is a profound desire of my government, as also, I believe, it is of Chile. Moreover, this interchange would augment the sympathy which my country has for Chile. Naturally this interchange would be done in the same manner as that which has been initiated between Chile and England."

"And what can you say to us about the commercial relations between our country and Japan?"

"These are on a highly satisfactory footing, because Japan as much as Chile needs them to be active. Nitrate is one of the products which is most consumed in my country. During last year alone we bought around 12 million pesos' worth of this article, and the importation of it will augment as the activities in the nitrate region go on becoming normalized."

"And what could you remark on the Chilean-Peruvian question?"

"I believe that only in the Washington Conference can some of the points of this interesting problem be settled. But anyway, Chile's right to these Provinces is undisputable, because it is only necessary to notice that they have been in her possession during 40 years, and it is easy to realize that during this time they must have changed greatly."

UNPOPULARITY OF JAPANESE ENLISTED SERVICE.

14 April, 1922.

A Japanese naval officer of flag rank recently returned from a recruiting trip through Osaka, Miye, and Shimane Prefectures. He was very much discouraged by the results of the trip, applicants for volunteer service being less than half the number called for.

In Kanagawa Prefecture the call was for 104 volunteers, while the number of applicants was only 70.

This lack of interest in the enlisted service is attributed by the Japanese press to the Limitation of Armaments agreement. However, it is believed that the steadily declining popularity of the military and naval services, with their long terms of enlistment (six years for volunteers in the navy) and the extraordinarily low pay, in favor of commercial and industrial callings is more responsible for the shortage of volunteers than the Washington agreements.

JAPANESE DEPTH CHARGES.

14 April, 1922.

No depth charges have ever been seen nor have the parts of any been seen under construction at any naval arsenal during the past two years.

However, as Japanese destroyers operating in the Mediterranean during the war were equipped with British depth charges, it is natural to believe that a certain number, at least, of these are now in storage.

TAKESHIKI NAVAL STATION.

14 April, 1922.

There is reason to believe that the Japanese naval station of Takeshiki (for some years practically abandoned) on the northern end of the southern island of the Tsushima group (in the Tsushima Channel between the Japan and China Seas) is being put in repair and being used by the Japanese Navy.

This is very interesting at this time of economy and reorganization in line with the Washington agreements.

DICIPLINE IN JAPANESE NAVY.

28 April, 1922.

In considering the subject of discipline as applied to the Japanese Navy, the difference between the Japanese and American mental characteristics, their varying ideas of right and wrong and of morality must not be lost sight of.

To the Japanese loyalty is a religion and the prime virtue. This means not only loyalty to the Emperor and the country but to any person in authority, whether in military, commercial, or home life. Loyalty, in the Japanese sense, means not only obedience to an order but also compliance with the wishes, expressed or intimated, of those in authority.

By comparison with the American, the Japanese is docile, patient, and lacks energy, initiative, and inventiveness. It is much easier for him to obey a regulation than to break it. At the naval academy a regulation is almost never broken, and even then is most effectively punished by causing the offender to wear a black cap for some days, varying with the enormity of the offense, thereby announcing himself to the rest of the school as an offender against the laws of his Emperor. An exaggerated sense of honor and an enormous personal pride makes this punishment much more effective than confinement or demerits.

The family spirit that is so distinctly a part of the country manifests itself in men aboard ship attempting to uphold discipline as a unit.

Drunkenness and intercourse with women are not considered immoral or wrong. Intercourse with women is almost encouraged, as it is considered to have a value in reducing nervousness and making the life of a man more contented and happy.

The history of Japan for generations back reveals a healthy respect for military organizations. Formerly military life was so much better and comfortable than the average home life of the people that it was considered a very desirable life, even leaving out the honor of serving the Emperor. Since the World War, however, opportunities for young men have increased, with a corresponding decrease in the popularity of the military service.

With the above characteristics in mind, it may easily be seen that naval officers are not far wrong when they state that the question of discipline gives them no concern at all, and they very seldom find it necessary to resort to it.

Naturally there are some serious breaches of discipline, but they are extremely rare. Petty thievery is one of the most common, being the cause of more than one-half of the punishments inflicted. "Late returning from liberty" is the next most common. All of the other cases are of such divergent nature that it would be difficult to classify them.

In all cases, except small craft, one schedule of fixed and uniform punishments is adhered to. In smaller craft, where the officers are more intimately associated and where the men are better known than in the larger ship, the matter of punishments rests entirely with the commanding officer, who uses his own discretion and does not adhere to the schedule of punishments. This procedure is not sanctioned by regulations but is not criticized or questioned.

In large ships punishments are handled by both the commanding officer and the executive officer, the executive officer administering punishments up to deprivation of liberty.

Division officers sometimes administer punishment for minor offenses too trivial to be reported. The punishment is usually in the nature of a kick or a slap in the face for such offenses as untidy clothes or shoes or slowness in performance of duty. These punishments are not authorized, but are allowed to pass unnoticed.

Japanese military courts correspond to our summary and general courts-martial, and in addition there is a final court which sits in Tokyo and is ordered by the minister of the navy. This court is only used in special cases.

The most common punishment is restriction of leave or liberty, and even this restriction is so mild as to be almost incredible to an Eng-

lish or American naval officer. It would seem that the greatest punishment lies in the disgrace of having to be disciplined rather than in the sentence itself.

JAPANESE NAVAL RESEARCH BUREAU.

28 April, 1922.

With reduction of capital ship ratio to 60 per cent of England and America, it becomes necessary to thoroughly improve the internal workings of the navy to the uttermost efficiency, and to bring this about they will pay serious attention to technical researches in various branches. This, of course, is what they have been doing heretofore, but on account of lack of funds it was not carried out as thoroughly as the navy department wished.

At present, bureau of matériel is divided into the following sections: First section, gun making, steel making; second section, torpedo, arms at sea; third section, electricity; fourth section, ship construction; fifth section, engineering; sixth section, aeroplanes; seventh section, submarines; besides an executive section which controls all the above.

All of the above sections are attending to (1) administration, (2) plans for manufacture, and (3) study and research, but due to lack of sufficient forces and funds they could not devote much time to research. This, however, it is reported will soon be remedied by the creation of an independent research bureau, which will be headed by either a vice admiral or a rear admiral and which will control and push researches in all branches. At the same time the experimental laboratories in navy yards of Yokosuka, Kure, Sasebo, and Maizuru, Tokyo Naval Arsenal, and Hiratsuka Powder Works will be much improved, cooperating with the head bureau above mentioned.

JAPANESE AVIATION PILOTS.

14 April, 1922.

No special physical examination and no particular educational or technical requirements are placed on candidates for pilots and observers in the Japanese Army. This is true also of the Japanese Navy pilots and observers.

The army course of training follows the French Army course, but is not so thorough and comprehensive. This is no doubt due to the employment of French aviators for instructors.

The navy course of training is after the British method, introduced by the British aviation instructors now employed by the navy.

PARACHUTE DESCENTS; JAPAN.

31 March, 1922.

Lieut. Commander T. Orde Lees, jumping from a kite balloon at the Yokosuka Naval Air Station yesterday, succeeded in making 10 consecutive parachute descents in less than two hours.

All the descents were made from a height of 400 feet. This low altitude calls for a high safety factor in the opening of the parachute, as a body falls 400 feet in less than six seconds.

The demonstrations were made to convince Japanese pupils of the reliability of the Guardian Angel parachute used by the British Royal Air Force.

On each occasion a Japanese pupil accompanied Lieut. Commander Orde Lees in a separate parachute, except on the occasion when Lieutenant Commander Brackley made a descent.

Twenty descents in all were made without a single untoward incident.

ORGANIZATION OF JAPANESE FLEET.

31 March, 1922.

Effective April 1, 1922.

THE FIRST FLEET.

First Division.—Admiral Tochinai.	Second Division.—Vice Admiral N. Nakano.	Third Division.—Vice Admiral Hyakutake.
Nagato (Flag) (BB).	Hiyei (flag) (CC).	OI (CL) (flag).
Mutsu (BB).	Kongo (CC).	Kiso (CL).
Ise (BB).	Kirishima (CC).	Tama (CL).
		Kuma (CL).

First Destroyer Division.

"Tenriu" (DL), flagship, Rear Admiral Otani, commanding.

Fifteenth Flotilla.	Twenty-fifth Flotilla.	Twenty-seventh Flotilla.	Twenty-sixth Flotilla.
Hagi (DD).	Kaya (DD).	Ashi (ODD).	Kuri (DD).
Fuji (DD).	Nashi (DD).	Warabi (ODD).	Nire (DD).
Susuki (DD).	Take (DD).		Kaki (DD).
Tsuta (DD).	Momi (DD).		Toga (DD).

First Submarine Division.

"Yahagi" (OCL), flagship, Rear Admiral T. Imaizumi, commanding; "Karasaki" (AS), depot ship.

Fourth Flotilla.	Fifth Flotilla.	Sixteenth Flotilla.
No. 28 (SS).	No. 38 (SS).	No. 34 (SS).
No. 29 (SS).	No. 39 (SS).	No. 35 (SS).
No. 30 (SS).	No. 40 (SS).	No. 36 (SS).

THIRD FLEET.

"Nisshin" (OCL), flagship, Vice Admiral K. Suzuki, commander in chief.

Fourth Division.
Nisshin (OCL) (flag). Hyuga (BB). Kasuga (OCL).

NOTE.—"Nisshin" (OCL) is proceeding shortly to Vladivostok, where she will be considered as a temporary Fifth Division.

Stations of Japanese Men-of-War.

With the following exceptions, Japanese men-of-war are stationed in home waters: Russia—*Iwami* (OBB), Vladivostok; South Seas—*Tone* (OBB), Sourebaya; China—*Akashi* (OCL), Nanking; *Uji* (PG), Hankow; *Saga* (PG), Hankow; *Fushimi* (river gunboat), Chosha; *Sumida* (river gunboat), Shanghai; *Toba* (river gunboat), Hankow; *OI* (CL), *Kiso* (CL), *Tama* (CL), *Kuma* (CL), *Hongkong*.

JAPANESE NAVAL VESSELS—CLASSES OF RESERVE.

14 April, 1922.

First reserve ships.—Practically complete complement of officers and men, but target practice, steaming, and maneuvering carried on to a less extent than vessels in full commission. Ships are put into this status for economy, but are ready for duty at all times.

Second reserve ships.—Less firing, steaming and maneuvering than first reserve ships. Complements slightly reduced. Ships seldom put into this category. Ready for duty on short notice.

Third reserve ships.—About 50 per cent complement of officers and men. Contents of magazines stored on shore. No target practice or steaming. Ships not liable for duty without warning.

Fourth reserve ships.—About 20 per cent complement of officers and men. Ammunition and stores landed. Ships of little or no value placed in this category. Would be used only in emergency.

NAVAL REDUCTION IN JAPAN.

Source: Reliable.

14 April, 1922.

The Diet adjourning on 25 March, 1922, passed the budget as submitted. The naval items were made up before the termination of the Washington conference.

The vice ministry of the navy (Vice Admiral Ide) explained to the Diet that there was insufficient time to reconstruct the naval budget to take into account the agreements arrived at in Washington.

It is probable that an extra session of the Diet will be called this summer for the purpose of cutting down the naval and military appropriations for 1922–23.

Naval reduction in Japan, as elsewhere, will result in unemployment for Government and private shipyard workers in large numbers. Here they are demanding a discharge bonus amounting to two years' pay.

The Diet was well aware of this matter and of the cancellation of contracts and cessation of work incidental to the abandonment of the major-ship construction in the eight-and-eight program, and considered that the budget as submitted would defray these necessary expenses of readjustment.

The people and the press, of course, optimistically expected prompt naval reduction to result in immediate savings that would at once reduce their personal taxes and make funds available for education and improved communications. They soon realized, however, that no such immediate results were to follow. This has resulted in almost complete loss of interest by the people.

The Japanese Government is more than pleased with the Washington Conference. The business men are well satisfied. The public is indifferent but the navy is very much upset.

At a meeting of the Prime Minister and the leaders of the House of Peers over the budget on 19 December, 1921, the vice minister of the navy, speaking for the Navy Department, denied that the defense of the country need suffer because of the failure to obtain 70 per cent ratio, stating that the navy would make up deficiencies in tonnage by increasing the efficiency of its fighting ships and by new tactical arrangements. He added that the national defense had been simplified by the agreement on fortifications.

Admiral Baron Kato, the Minister of the Navy, has given at Washington (where he was the chief delegate from Japan) a noteworthy exhibition of his ability and clear-sightedness in large affairs. He has retained the navy portfolio for the past seven years, sitting in three cabinets and being next to the Premier in the last one. He is the man responsible for the carrying into effect of the 8-and-8 program. This being a militaristic nation, he must be determined to make every unit and department of the navy as efficient as possible.

As naval efficiency depends fundamentally on the efficiency of naval personnel, it will be interesting and instructive and worth while to note what action Japan will take in this most important factor of naval reduction.

Admiral Kato and his assistants will use all their strength and good judgment and experience to make the 5–5–3 a ratio of which the 3 is the best three possible.

If the American Congress reduces the United States Navy so that the remaining 18 major ships and the cruisers, destroyers, and submarines are only partially manned (have depleted crews) America's 5 will soon be equal to Japan's 3. Japan admires above all the idealistic spirit of the American people and fully appreciates America's desire to set the world an example in more than carrying out the agreement made at Washington.

Since, however, the nations of the earth, after most careful consideration by their delegates, decided that 5–5–3 was the safe and sane, irreducible minimum of relative strengths, it would seem axiomatic that this ratio be most jealously maintained.

Japan will see to it that her 60 per cent is the best possible, and America must make her 100 per cent effective in order that her ideals may prevail and her interests be protected.

Japan, while acceding to the demands of progress and circumstances, still retains her previous ambitions and antagonisms. The Washington Conference did more for Japan than for all the other countries in the world combined. It prevented the construction of the 8-and-8 program—a monumental mistake on Japan's part and one that was actually bankrupting her.

The atmosphere of friendliness and understanding created by Mr. Hughes made it easy for every nation to abandon old lines of conduct that were injurious to themselves, as well as inimical to others.

JAPANESE SHIPS DECOMMISSIONED.

Source: Reliable.

14 April, 1922.

The articles in the Japanese press in regard to the putting out of commission of various naval vessels are certain to be very misleading to the average reader.

The newspapers convey the impression that the vessels are being scrapped, i. e., done away with, while, as a matter of fact, they are only being removed from the active cruising fleet and being laid up at the various yards (they could be recommissioned at any time).

In some cases the vessels named are being assigned to the defense divisions at the various naval stations (these are being put out of commission in name only).

The newspaper announcements regarding these ships create an erroneous impression, and no credence should be attached to such important statement until official announcement has been made through the proper channels and until actual, physical dismantling is well under way.

To date no mention has been made in the Official Gazette (a Government organ) of the scrapping of any naval vessels.

From the Japanese practice in the past it is only reasonable to suppose that Japan will be the last to scrap her ships and reduce her personnel.

There is reason to believe that the Japanese Navy Department does not intend to scrap any vessels or reduce the naval personnel in compliance with Washington Conference agreements before an important meeting of the cabinet in August, by which time it is expected that the other signatory nations will have ratified the treaty and announced the disposition of their vessels and the reduction of their personnel.

The putting out of commission of these worthless, entirely obsolete, old craft has no connection whatever with the Washington Conference and is entirely a matter of naval domestic economy decided upon and announced months ago by the Minister of the Navy (announced in Japanese press on 17 Oct. 1921).

The cutting down of the naval budget for 1922–23 for the sake of economy necessitates (1) a decrease in the number of officers: (2) shortening the term of enlisted service by three months at completion: (3) abolition of second fleet; (4) putting into effect the system of "fourth reserve ships" with reduced complements (some 30 ships were to be changed to this status). These steps are expected to effect an economy of about 7,000,000 yen.

Obsolete Japanese naval vessels stricken from Navy list on April 1, 1922.

Ship's name.	Type.	Tonnage.	Completed.
Suwo	OBB	12,674	1902 (Russia).
Tsucaru	OCL	6,630	1901 (Russia).
Chiyoda	OCL	2,439	1892.
Hashidate	OCL	4,278	1894.
Akitsushima	OCL	3,172	1894.
Okinoshima	OBB	4,126	1896 (Russia).
Mishima	OBB	4,960	1895 (Russia).
Murasame	ODD	381	1902 (Yokosuka).
Asagiri	ODD	381	1902 (Yokosuka).
Fubuki	ODD	381	1904 (Yokosuka).
Shirakumo	ODD	333	1902 (England).
Asashio	ODD	333	1902 (England).
Akebono	ODD	345	1899.
Shiranui	ODD	326	1899 (England).
Kagero	ODD	326	1899 (England).
Usugumo	ODD	326	1900 (England).
Torpedo boats.			
Shirotaka	ODD	127	1900 (Mitsubishi).
Kari	ODD	152	1903 (Kure).
Aotaka	ODD	152	1903 (Kure).
Hato	ODD	152	1903 (Kure).
Tsubame	ODD	152	1093 (Kure).
67, 68, 70, 71, 72, 73, 74, 75	ODD	89	1903–4 (Japan).
Submarines.			
8, 9	OSS	$\frac{286}{316}$	1908 Vickers (England).
10, 11, 12	OSS	$\frac{321}{321}$	1911 (Kure, Vickers plans.)

NOTE.—Asagiri and Murasame will be assigned to Kure defense corps and used for miscellaneous duties.

Japanese naval vessels put in third reserve April 1, 1922, preparatory to scrapping on formal ratification of the five-power naval treaty.

Name.	Class.	Displacement.	When completed.	Where built.	Disposition.
Settsu	BB	20,800	1912	Kure	Third reserve.
Aki	OBB	19,800	1911	do	Do.
Satsuma	OBB	19,350	1910	Yokosuka	Do.
Hizen	OBB	12,700	1902	United States	Do.
Mikasa	OBB	15,362	1902	England	Do.
Kurama	CA	14,600	1911	Yokosuka	Do.
Ibuki	CA	14,600	1909	Kure	Do.
Ikoma	CA	13,750	1908	do	Do.
Shikishima	OBB	14,765	1900	England	Converted to training ship.
Asahi	OBB	14,765	1900	do	Do.
Haga	BB	39,979	1900	Nagasaki	To be dismembered at Saseb.
Tosa	BB	39,979	1900	Kobe	To be dismembered at Kure.
Amagi	CC	41,000	1900	Yokosuka	Airplane carrier.
Ahagi	CC	41,000	1900	Kure	Do.
Atago	CC	41,000	1900	Kobe	Work stopped after keel was laid.
Takao	CC	41,000	1900	Nagasaki	Do.

SPECIAL JAPANESE TARGET PRACTICE IN MARCH, 1922.

On March 9, 1922, the *Aki* (twelve 3-inch, two 3-inch antiaircraft, eight 6-inch .40 caliber) and *Satsuma* (OBB) (four 3-inch, two 3-inch antiaircraft, and twelve 4.7-inch .40 caliber), with a battery of four 12-inch (45 caliber) and twelve 10-inch (.45 caliber), began a special full-charge target practice. The *Aki* is credibly reported to have fired 360 shots in two hours. The firing was a practical test to determine what could be obtained in the way of maintained rapid accurate fire. Two pointers apparently fired at every gun, each firing a string of five aimed shots.

The firing was witnessed by Admiral Takarabe (commander in chief, *Sasebo*) and General Matsuura (Tokyo army arsenal) and some 40 other army and navy officers.

On April 1, 1922, orders were given to place the *Aki* and *Satsuma* in 3–A reserve—i. e., 50 per cent of officers and men retained on board.

Not only was it desired to ascertain how rapid a rate of accurate fire could be maintained for some time, but the imminent retiring of the ships, with their old guns and equipment, from active service made it an unique opportunity for expending the old ammunition usefully.

JAPAN'S NEW PLAN OF NATIONAL DEFENSE.

14 April, 1922.

On 21 March, 1922, a board of fleet admirals and marshals met and discussed a new plan of national defense (submitted by the chiefs of the army and navy general staffs) necessitated by the results of the Washington Conference.

Briefly, the new plan is as follows:

Japan can no longer depend upon either America or Great Britain for help in case of war, but must depend entirely upon herself. She must be prepared to endure alone for five years, unaided except by the hope of ultimate victory. In order to accomplish this end, the lines of defense will be as follows:

The first line of defense at sea will extend from the Kurile Islands, through the Bonins and Loochoos to Formosa, thus securing control of the adjacent Pacific, the Sea of China, the Yellow Sea, and the Sea of Japan.

The first line on land will be from Hankow (China) through Shantung and Harbin (Russia) to Saghalien (no mention is made of the manner in which this line is to be established and held).

As a second line the Straits of Tsushima may be used to hold the enemy off for a long time.

As a result of the reduction of our navy, it will be impossible to carry on war at long distances from home, and for this reason the lines are drawn near to Japan and must be held at all costs.

Night attacks will be the main tactical principle.

The above article, published twice in Tokyo by a Japanese newspaper, the Yomiuri, on April 1 and 7, 1922, was commented upon adversely by the London Times on April 4. The Times characterized the implications as being a negation of the whole spirit of the Washington agreements and regards as serious the symptom of misinterpretation of the Washington Conference. The Times thinks that Japan may intend to exploit China to atone for losses at Washington.

This adverse comment of the London paper caused an immediate stir in Japan.

The Japanese War Department, on April 8, branded the Yomiuri article as false and absolutely groundless. The Japanese War Department also issued a statement by the Vice Minister of War officially denying it and regretting that such irresponsible and groundless articles should be published and create alarm abroad, thereby possibly disturbing the good relations between countries.

MEXICO.

Source: Reliable.

7 April, 1922.

A marked lull in rebel and bandit activity during the last six weeks is a noteworthy feature of the situation in Mexico. For this condition credit is due in a large measure to the Federal forces, which have been used unsparingly in the suppression of the major rebel activities in the north and south central portions of the Republic. The lack of coordinated leadership and control of the discontented rebel and bandit elements, the severe repressive measures adopted by the central government against all persons engaged in revolutionary activity or suspected thereof, together with the recog-

nition propaganda in the United States and Mexico, have contributed to lessen revolution and banditry.

Indications of new uprisings are reported from the oil regions in the vicinity of Huesteca. The significance of this fresh outbreak is emphasized by the detail of Gen. Guadalupe Sanchez, military commander of the State of Vera Cruz, to take charge of the military operations against the rebels and the prompt dispatch of reinforcements to the affected regions. The movement is charged to the adherents of Gen. Manuel Pelaez. Printed proclamations have also appeared in Mexico City, purported to be signed by the commander of the second (eastern) division, Gen. Mario Ferrer, and to have been issued at the city of Oaxaca on April 2, 1922. Gen. Felix Diaz is recognized as the "supreme chief" of the movement. No military activities have as yet followed this new proclamation.

Of far-reaching importance as affecting future rebel and bandit activity is the presidential decree of April 7, which directs the Attorney General to issue instructions to all agents of the Department of Justice to confiscate all properties of the rebels in arms against the Government. The list of rebels published by the press includes prominent anti-Obregonistes resident in the United States, as well as the rebels in the field engaged in active operations.

There is every indication that the midsummer elections will materially assist the growth and spread of radicalism. The administration is openly in the field to obtain votes in order to continue in office the senators and deputies of its own political creed and leaves nothing undone which brings to its support the electorate of every class. That Bolshevists and Radicals are placated by the most prominent leaders of the administration is common knowledge. May Day demonstrations took place in San Luis Potosi near the office of the United States consulate, in which 2,000 persons participated. The orators of the occasion bitterly arraigned the United States for the persecution of Bolshevists and for failure to recognize Russia. The Radicals are finding opposition only in the members of the Catholic Party. Clashes between Radicals and Catholics, especially in the States of Jalisco and San Luis Potosi, are frequent occurrences.

According to press reports, the lifting of the embargo on arms and munitions to Mexico by the United States has suggested to the Governments of the various States the purchase of arms for the equipment of civilian officials who will be charged with the maintenance of public order, supplementing to a great extent the functions of the Federal forces. Indeed, the Governments of the northern States of Mexico, it is reported, have already placed large orders in the United States for arms and munitions. It is said that the importation of

arms for this purpose has received the sanction of the Federal Government. In this connection, it is further reported that the Federal Government has received 10,000 Mauser rifles from Germany and that these will be used to replace the damaged rifles of the Federal forces stationed in the various zones of operations.

The long-expected regulations on the agrarian law were promulgated by the Executive on 18 April. The issue immediately raised by these regulations is one of States rights under the constitution. The press criticism on the following day predicted an intense rivalry and friction between the several States of the Federation and the Executive. It is stated that the Executive regulation in a great many instances is in conflict with the agrarian laws of the States. In general terms, however, the regulations are considered as mild when compared with radical enforcement of the agrarian law under Gen. Antonio Villareal, the ex-Secretary of Agriculture.

Of great significance in the agrarian situation is the reaction which has begun to make itself felt in opposition to the enforcement of the agrarian law. The Mexican press of 22 April reports that the representatives of the agricultural chamber of Puebla, in conference with President Alvaro Obregon, described the agricultural industry in Puebla as in complete ruin, due to the allotment of common lands. The conference was made the occasion for presenting to the President a petition requesting a suspension of the procedure in agrarian matters until the law is amended and urging the initiation of legislation looking to reforms in the agrarian laws. The petition also contained a request for the establishment of a protective import tariff.

The settlement of Mexican debt continues as a topic of intense interest to Mexico City, although the conference between the international committee of financiers and Gen. Adolfo de la Huerta, the secretary, reported that certain specific claims that will be made the basis for discussion have been agreed upon by the committee and will be presented to De la Huerta. In well-informed Mexican circles it is stated that the committee has agreed to an arrangement whereby a partial moratorium on the Mexican debt shall be declared, giving to Mexico 20 years in which to pay outstanding obligations.

Telegraphic reports from Mexico City, dated 3 May, state that the American committee representing oil companies in Mexico had reached a satisfactory agreement in the matter of taxation. The production tax has been agreed upon on the basis of valuation of petroleum. As to export taxes, the arrangement of 3 September, 1921, remains effective.

SITUATION IN RUSSIA.

15 April, 1922.

The following information, received from a reliable source, is quoted:

The present famine in Russia is due to economic and political conditions and was not caused by the drought, as the Soviets announced.

The last grain crop in the Volga district was only 2½ per cent of normal productions, and conditions will not improve unless seed grain arrives soon and animals or means of plowing and planting can be found.

The American Relief Administration can feed only about one-fifth of the starving population, so they pick out the young and healthy with the most chance of living.

The relief work must continue for at least two more years if it is to be of benefit.

The work of the American Relief Administration is apparently not appreciated by those whom it is feeding at the present time. This is due to the apathetic attitude of the people, who have lost all interest in anything except simply existing.

The Government is giving no aid in the feeding and in most cases is a great hindrance. The officials are ignorant and suspicious and mistrust the motives of the American Relief Administration. The only way to treat the officials is to bully them and to bluff them.

Everybody is endeavoring to get away from the famine region and into the cities. Few have any idea where they are going—the thought being simply to escape.

Disease is very rampant in the famine area—in some towns as many as 98 per cent are infected.

A physician in Moscow stated to him that not more than 4 per cent of the men in Russia over 30 years of age were capable of producing healthy infants. This is due to famine and disease.

In his opinion the present Government would have fallen in six months had not it been for the American Relief Administration. The Soviet Government is using the relief work as propaganda for itself.

By fall he expects to see the present Government changed, bringing in some intelligent leaders. The change will come bloodlessly, except for the "Checkas," who will be killed as soon as their protection is gone.

The Soviet Government is now living in a great fear of a counter-revolution. All former White Army officers are being tabulated and are made to report to the police every 24 hours.

The present policy of the Moscow Government is one of playing for the favor of the United States, hoping that recognition may come to them and that the region may thus be saved.

THE SOVIET NAVY.

Source: British Press.

20 April, 1922.

[The Morning Post of 19th April, 1922, contains the following half-column article headed "The Soviet Navy—a European Factor," which has been prepared by some one apparently familiar with the condition of the Russian Navy at the present time. Evidently it was inspired by the possible outcome of the Soviet-German treaty signed at Genoa a few days ago.]

It seems possible that the present Soviet Navy, although at present in a condition of great inefficiency, may become a factor in the European situation. Russia has the ships, the dockyards, and the arsenals, and Germany has the trained personnel. Always hitherto lacking in technique and in the higher leadership, a Germanized Russian Navy might, in the course of time, become anything but a negligible quantity.

Since 1917 the Russian fleet has been steadily deteriorating. In that year a considerable number of ships of all types were under construction, and it is believed that very little or no work has since been done in the matter of their completion. Still they exist, and the skilled workmen which Germany possesses in thousands would probably be able to complete them within a reasonable period. The following table shows, as far as is known, the present composition of the fleet, which is divided between the Baltic and the Black Sea, with small forces in the White Sea and on the Caspian:

Battleships (predreadnought)	8 (engines of 4 destroyed by explosions in 1919).
Dreadnoughts	4 completed; 1 not completed (launched 1916).
Cruisers	8 (engines of 1 destroyed by explosions in 1919).
Light cruisers	1 completed.
Destroyers	88 completed; 20 not completed (launched 1915–1917).
Submarines	24 completed; 19 not completed.

Organization and Discipline.

The fleet is organized in four commands—Baltic, Black Sea, White Sea, and Caspian. The respective commanders who rank with army commanders, have a naval staff to assist them and in addition a political commissar in charge of education. Every ship over a certain size has also a political commissar on board, and these officials are also attached to destroyer and submarine flotillas. The power which these political officers have hitherto exercised has, however, been much curtailed.

Attempt is being made to restore the discipline of the fleet to what it was before the revolution, and officers now have separate quarters and cabins. Salutes have been reintroduced, and commanding officers now have wide powers in the awarding punishment for disciplinary offenses, including the sentence of death for disobedience of orders while at sea. Special rations are supplied to the crews when at sea, but, generally speaking, they are required to provide their own food.

Altogether there appears to be an awakening in regard to naval matters, which is not without its significance at the present juncture.

SPANISH OPINION CONCERNING NAVY.

1 April, 1922.

Since the Disarmament Conference at Washington many articles have been appearing in the press and service papers on the future policy of the Spanish Navy, and considerable interest is shown in this subject.

Now that the great powers have agreed to a reduction in naval armaments, Spain has an opportunity to become a naval power of some importance in the Mediterranean, and the fact is pointed out that this can now be done at comparatively small expense and to the great benefit of Spanish commerce and international prestige.

The following translation of an article by a well-known writer in the Correspondencia Militar shows the usual trend of thought on this subject:

It is a pity that the troubles we are experiencing to-day over the African question has caused us to lose sight of the enormous importance which the agreements of the Washington conference on the limitation of naval armaments and the new proportions for the navies of Europe, America, and Asia hold for Spain and her future.

Unfortunately, having lost the Philippines and the Caroline Islands, the equilibrium of the Pacific does not now interest us except platonically, and only with regard to the Mediterranean and the Atlantic are we obliged to consider our future as a naval power.

With respect to large battleships, there remains only three navies in the world—the English, which continues to be queen of the seas; the American, which follows her in this category and in amount of tonnage (*even though not in quality nor in skill nor in artillery*); and the Japanese, which is, for political reasons, localized in the eastern Pacific and the seas of China and Japan.

The two first-mentioned fleets will reckon with some 500,000 to 525,000 tons, and the Japanese 350,000 tons. This proportion will not be altered for 10 years, according to the agreements of the Washington conference. The dominion of the seas on the part of England is thus unquestionably fortified with greater security than in any other period of the history of the world.

France is the victim of this agreement. Her tonnage is reduced to 170,000 tons of capital ships, and, in consequence, what is more serious for her, she is practically placed on a plane of equality with Italy. She has two seas to defend, the only means of communication being the Straits of Gibraltar, which makes it of vital importance for her to possess a naval base at Tangiers. This would naturally be contrary to our interests, as well as to those of England, which in general coincide with our own.

France and Italy having the same naval power, Italy becomes the queen of the Mediterranean. In effect, her maximum of strength, like the French Navy, must be six large battleships of 30,000 tons; and either France must abandon the Atlantic and concentrate all her fleet in the Mediterranean or Italy will exercise dominion over this sea. The Mediterranean Sea, then, will either be Italian or indeterminate between France and Italy in case of English neutrality. Furthermore, if one takes into account Italian imperialism, if one recalls the fact that to-day Italy has a greater population than France, it will be seen how great a peril for the latter (France) is represented by enlargement of the Italian navy.

If this equilibrium exists in the Mediterraneon, what, then, will be our rôle, our mission, our ideal? Simply to possess a fleet that may be able to break the equilibrium and give to the side to which it may be joined the preponderance of naval power.

For this it will be sufficient for us to possess three battleships, or 120,000 tons of capital ships. These three great battleships, joined with the six French or with the six Italian (or perhaps forming one division of an English squadron of three others), would give the victory, or at least the numerical superiority, to our ally.

Is this possible? We believe it is, and we believe further that this is the opportune moment, and that if our governing officials were able to foresee the future, instead of limiting themselves to solving the existing problems of grave importance, they would take into account the fact that just now the naval truce leaves many English workmen unemployed and that materials of construction will undergo a great drop in price. For this reason there will never be a time more favorable to lay the keels of three battleships of 30,000 tons and to establish in Spain the shipbuilding industry, attracting the enormous number of English workmen who will be left without employment and inducing them to take up their residence in Spain.

Let us not forget that there is no "commercial traveler" like a warship, that commerce follows it, and that without it (the warship) it abandons the field. We shall never be able to fight alone, but we are too powerful (in spite of bad governments) to be "protégés," without contributing actively to our defense. Three battleships will be sufficient to cause our aid to be solicited on the sea. Would it be too much to ask that our Minister of Marine occupy himself with this question?

However, there is no possibility that these ideas for naval expansion will be given any serious consideration. There is no indication that the Government has the slightest interest in the formation of a really efficient fleet, and the present serious financial situation precludes any thought of large expenditures for the navy. The general attitude of the people is one of complete apathy.

From my personal observations up to the present time I should say that the navy is relatively as inefficient and badly administered as it was in 1898. As a naval power, to-day, Spain is negligible, and I see no prospect of any change in the future.

SPANISH MOROCCO.

20 April, 1922.

Foreigners in Spain are always told—

That Spain was only in Morocco for the purpose of advancing civilization and complying with the obligations imposed upon her by the Algeciras treaty.

That Spain had been given the protectorate over the worst portion of the country, both as regards natural resources and native population. Several officers told me that Spain, under the treaty following the operation of 1859, should have had the protectorate over entire Morocco, including Tangier, but that France and England by a

secret agreement prior to the Algeciras treaty, had double-crossed Spain and given to France control over the richest part of the country.

That the nature of the country—mountainous—lack of roads, etc., made military operations extremely difficult and that the Spanish Army were doing very well, considering the conditions. No attempt, however, was made to explain or excuse the disaster of last July or to defend General Silvester, whose conduct of affairs would seem to be inexcusable from a military point of view.

That what was most needed for the successful pacification of the country was less military and better political work. This seems to be true, for under the present conditions very little headway is being made. In the eastern zone (Melilla), where the principal military operations of the last few years have been conducted, very few natives were seen. Most of the native houses and villages appear to have been destroyed, and the Moors who formerly occupied them are now in the mountains with Ab-del-Krim fighting the Spaniards. Spanish officers were most outspoken in their criticism of the Government, saying that, of course, the army would accomplish very little with such an inefficient Government in Madrid.

That it would be a calamity for the future peace of Europe for France to get control of Tangier. This was repeated at every opportunity.

Spain seems to be making very little progress in the development and civilization of the country. In the western zone (Tetuan and Larache) what is most needed are roads and railroads. Work on the roads is going on, but the progress is very slow; work is done by natives who, I undersand, receive 4 or 5 pesetas a day. They appeared to have no interest in their job and to be doing a very poor day's work. No modern road-making machinery was seen. Several railroads are projected. A small, narrow-gauge road is being built from Tetuan to Chauen, but the work is progressing slowly. A railroad is also being built from Tangier, through Arcila and Larache, to Fez. Part of this zone, particularly in the vicinity of Larache, appears to be a rich agricultural country and could be profitably colonized by the Spanish, but no efforts are being made by the Government to do so.

SPANISH ARMY IN MOROCCO.

20 April, 1922.

It is difficult to form a definite opinion of the Spanish Army. Many of the units inspected appeared efficient and well organized, even discounting the fact that careful preparations had obviously been made for our visit, and many of the officers I met were of a high class, intelligent, interested in their profession, hard working,

and with excellent ideas on military matters. The younger officers, particularly, appeared to be of a fine type. The Spanish soldiers created a very favorable impression; they were punctilious about salutes, which would indicate that the discipline is good, and appeared to be well behaved, hard working, good natured, not particularly intelligent, but with considerable pride in their position. They would be splendid material for an army if properly instructed and led. However, the results attained by the Spanish Army do not justify this favorable impression, and I am inclined to the opinion that, while fairly good in things that show on the surface, the army is totally deficient in fundamental training. For example, I saw no indication of any rifle practice being held or of any target ranges, although in the style of warfare being conducted in Morocco, good shooting is of extreme importance, as they are fighting against an enemy famed for their skill as marksmen. If the Spanish soldiers were all expert riflemen, they could accomplish the same results with a very small percentage of the men now being used.

By far the best troops were the regulars, or native troops with Spanish officers, but there are only about 5,000 of these. They would like to have more, but have difficulty recruiting them and do not feel any too certain of their loyalty.

The Foreign Legion looked quite good. The commanding officer, Lieut. Col. Milan Astray, is a picturesque figure, quick, full of energy, with a magnetic personality, and a good leader. He seemed to be on terms of familiarity with his men and to have the personality to do this successfully. The other officers are not so good. The men appeared to be a rough crowd, recruited, I should say, from the toughest element in the country, but they made good soldiers. Only about 15 per cent are foreigners. One thing that impressed me was the presence in the camp at Dar Drius (the most advanced position of the Melilla sector) of five or six horrible looking women. On inquiry I was told that they always traveled with the regiment, and were for the use of the men. I was told that this was not done in any other organization of the Spanish Army, but that Milan Astray had insisted upon this special privilege when the legion was organized. This illustrates the type of men composing the Foreign Legion.

The strategy of the campaign seems poor. Innumerable small outposts of from 10 to 50 men are scattered all over the country in isolated positions. Keeping them supplied is a difficult and most expensive task, and they would seem to serve no useful purpose other than to wait for the enemy to attack them and then act on the defensive. There may be some good reason for this policy, but I was unable to discover what it is. It appears to be a violation of sound military principles.

The defenses of these positions also seemed to me ridiculous. At cost of tremendous effort field guns had been hauled up to inaccessible positions where they could do no good, and walls of sand bags not high enough to afford real protection against rifle fire had been built in many places. The wire entanglements surrounding the positions were ridiculously inadequate. The general impression was that of small boys playing at the game of soldiers.

The following is my impression of the prominent military leaders I met:

General Berenguer, high commissioner, Tetuan.—An intelligent man, of great energy and strong character, who likes to see things happen quickly. For this reason, I am told, he was not at all popular with the Government. Did not hesitate to openly criticise the Government.

General Berrera, commanding Larache zone.—A good officer, active, intelligent, and energetic. Said to be a tireless worker. A remarkably pleasant personality.

General Sanjurjo, commanding Melilla zone.—Impressed me as being the ablest military leader I saw. Simple and unaffected, with a keen, quick mind. (Has since been relieved from his command.)

NEWLY APPOINTED SPANISH MINISTER OF MARINE.

3 April, 1922.

The newly appointed Minister of Marine, Vice Admiral Don José Rivera y Alvarez de Canero, was born in 1862. He entered the naval service in 1875, served in the Philippines in 1897 as a captain in command of the battleships *Pelayo* and *España*, and was made a rear admiral in 1918. As a rear admiral he served in command of the division of instruction, from which duty he was relieved in January, 1921, promoted to the rank of vice admiral, and ordered to command the Arsenal de la Carraca (Cadiz), the naval gun and ordnance factory. He was serving in this command when appointed Minister of Marine.

He is said to be a man of genial and pleasant temperament and has a good reputation in the service as a progressive and intelligent officer; most of his shore duty has been spent in connection with ordnance matériel. He is a specialist in torpedoes.

SPANISH POLITICAL SITUATION.

3 April, 1922.

The present Government, which has been in power for about four weeks, with Señor Sanchez Guerra, the Liberal leader, as Prime Minister, has not proved, so far, to be a great success.

When it came into office there were many problems of great national importance to solve, and the general impression seems to be that this Government is composed of the usual type of small-caliber politicians who will make no more headway than the former Government with their solution. The most important issues are—

1. The war in Morocco, which is costing enormous sums of money and is making no real progress.

2. The financial situation, which is most serious. A large deficit exists in the treasury and it is increasing at an alarming rate, due to the Moroccan war and the failure to enact laws which will produce revenue adequate to meet current expenses.

3. The necessary reorganization, improvement, and financing of the railroads, which are in a deplorable condition and totally fail to meet the needs of the country.

4. The new tariff laws which recently went into effect and are a cause of almost universal dissatisfaction. The duties are so high that it will be most difficult for foreign corporations to do business in Spain, and the cost of living, already abnormally high, is bound to increase.

Until these important matters are regulated in an honest, intelligent, and broad-minded manner, conditions in the country will go from bad to worse. There are about 14 different political parties, none of which commands a majority and none of which is composed of men of sufficient honesty, patriotism, and ability to solve any of the serious problems confronting the country. Conditions would be much more serious than they are were it not for the tremendous personal popularity of the King and for the almost childlike disposition and nature of the Spanish people. They have been accustomed for so many years to a bad Government and to dishonest officials that they expect nothing else, and whatever happens is taken as a matter of course. They talk a great deal on political subjects and all seem to agree that something should be done to remedy existing conditions. However, any efforts in that direction would require a certain amount of energy and initiative which is generally lacking in the Spanish character. So nothing ever happens and things go on in the same old way.

Already two ministers have had to resign from the new Government. The former Minister of Marine, Señor Ordonéz, was transferred to the Ministry of Justice, and a naval officer, Vice Admiral Rivera, has been appointed to the Ministry of Marine.

An army officer, General Olaguer, is already Minister of War. This was apparently done to offset the criticism against the former Government regarding the influence of politics on the administration of the Army and Navy and to strengthen the position of the present Government.

SPANISH BUILDING.

1 April, 1922.

It is now stated that the Government has decided to abandon the plans for the construction of the projected two light cruisers and destroyer leader of the new naval program, which will be limited to the construction of additional submarines. The reason given is that the financial condition of the country and the tremendous expense of the war in Morocco necessitate economy in naval expenditures.

Policy as regards increase of the navy changes very rapidly and seems to be based more on temporary political expediency rather than on any sound and intelligent plan for development of naval power. New construction, when once undertaken, proceeds so slowly that the object, in my opinion, is more for the purpose of keeping the plants of the "Sociedad Española de Construcción Naval" going than of adding new ships to the navy. This company, controlled largely by British interests, is very powerful. Their influence with the last Government was very great; with the present Ministry of Marine they would seem to have less influence. But Governments change very rapidly and naval policy changes with them.

At present the "Sociedad Española de Construcción Naval" are building three light cruisers at their plant in Ferrol. These were authorized in 1915. One is nearly finished, but the other two are not yet launched, and it will be many years before they are finished. Press reports from Ferrol state that much anxiety is felt over the announcement that a large number of men are soon to be laid off at this shipyard which now employs 2,600 men. This is due to the completion of the light cruiser *Reina Victoria Eugenia* and the trans-Atlantic *Cristóbal Colón* and to the abandonment of the project for the new light cruisers. Work on the two cruisers now on the ways will also probably be slowed down.

UNITED STATES POLICY OF ISOLATION.

Source: Lecture by Prof. J. Q. Dealey.

It is unnecessary at this time to review the political and military events of the last four years. The Great War is still vividly in mind, and at present our chief concern is a speculation as to how the war has affected our national policies.

The national policy most directly affected is the long-established policy of isolation, a policy often attributed to Washington and Jefferson, but traceable as far back as 1776, when John Adams, for example, warned against making an alliance with France "which would entangle us in any future wars in Europe." Yet even from the begin-

ning it was assumed that occasions might arise when temporary alliances might have to be made with European powers. A governmental policy is not fixed for all time like the law of gravitation, but is the course of action best suited to the safeguarding and welfare of the State. If some other course of action is better calculated to accomplish that purpose, then naturally the older policy temporarily or permanently should be scrapped and not allowed to hinder national development. Yet in the case of a policy of long standing the presumption always should be in its favor and the new must demonstrate its superiority before it is permitted to supplant the old.

The period when the policy of isolation was of most worth was during our first half century, when Europe was in turmoil and the United States had no rights as against the necessities of either France or Great Britain. The United States as a neutral State was not liked by either of the warring sides and was shamefully treated by both. In despair we at last plunged into the war, unprepared and somewhat blindly, and two years later were glad to emerge from it no worse off than we were.

After 1815 there was little opportunity for entangling alliances with Europe, even had we desired them. We had no special interests in the Crimea, in Turkey or the Balkan region, in Germany's wars under Bismarck, or in the struggles for colonial empires in Africa. When our interests seemed to require it we did not hesitate to take the Philippines from Spain, to annex Hawaii, to become entangled in a triple alliance with Germany and Great Britain in respect to Samoa, and to take part in the invasion of China at the time of the Boxer Rebellion. A policy of isolation implies that we have no interests worth fighting for outside our own continent, and hence that we may look over our fences east and west and watch our distant neighbors fighting among themselves, congratulating ourselves meanwhile that we are neutral and have no interests in the outcome. Great Britain herself in her insular position once rejoiced in her policy of "splendid isolation," yet somehow, in order to maintain the balance of power, she was forced more and more toward entangling engagements and finally plunged headlong into the greatest war in history, since it realized that the attack on Belgium was a direct thrust at its own safety and supremacy on the seas.

We, in 1914, were exhorted by President Wilson to be neutral in thought and act, since we had no immediate concern in the European situation. We felt slightly squeamish when Belgium was overrun; a few ventured to feel sympathetic thrills when our old ally, France, was devastated, and when we read of the horrors of the German advance into Russia—our traditional friend. When Canadians

fought in the fields of Flanders it seemed as though we ought to be there also, side by side, for they are our brothers of North America. The sinking of the *Lusitania* almost made us angry, but of course Americans had no business to cross the seas against the advice of Von Bernstorff. We tried to be impartial according to presidential warning, and in order to relieve our feelings we abused the British for interfering with our flourishing trade with the neutral States of North Europe. Yet somehow we got into the war, unprepared so far as the Army was concerned, hardly knowing just what particular economic interests were involved, but deep down in our hearts we felt that for the sake of our souls we must stand by the side of Belgium and France and Great Britain and declare war against the piratical submarine and the Hunnish warfare of the Central Powers. We, of course, formed no entangling alliances and we had no allies, merely associates. We tried to remain isolated from European politics and fought for ideals, not for territory or booty, and yet, when fighting in British waters and on the soil of France, we were most intensely American and carrying out a real American policy, since we fought tyranny and injustice, helped to free enslaved nations, and saved European democratic institutions from absorption by German militarism.

But now that the war is over, the question of isolation and entangling alliance again comes to the front. Geographic distances have so narrowed that the Atlantic is hardly wider than the English Channel of former times. Figuratively we sit on our narrow stretch of land between the two oceans and can almost touch the opposite shores with our hands. Is it possible longer to remain isolated and to say that the interests of Europe and Asia are separate and apart from our interests? We know right well that never again can we maintain a policy of provincial isolation. The interests of Europe and the United States have become united, and other signs indicate that we have a future also on the Pacific.

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 7—1922.

15 JULY, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 7—1922—15 JULY, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

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ATTITUDE OF ARGENTINE PRESS TOWARDS THE NAVY.

19 April, 1922.

The Buenos Aires press has taken on an attitude of marked hostility towards the present ministry of marine; and there appear daily sharp criticisms of naval administration.

The cause is openly stated to be the refusal of the ministry of marine to give information to the press.

The ministry of marine has repeatedly denied that any negotiation is under way for the purchase of submarines, whereas it is perfectly well known that there are two officers now in Berlin studying the proposal of the Swedish Langskorn Co. to sell fabricated submarine parts. The ministry has also denied the rumor that 10 young Argentine officers will be sent to the British Fleet for instruction, whereas it is confidently stated that this move will certainly be made.

The disposition of the recently reorganized ministry of marine is to give out nothing.

DISAFFECTION IN BRAZILIAN ARMY AND NAVY.

10 May, 1922.

Owing to the intense and bitter feeling aroused in the country by agitation over the present presidential campaign, Brazil is passing through a serious political crisis.

The opposition to the Government policy, headed by the candidate for President, Nilo Peçanha, is strenuously endeavoring to foment rebellion in the armed forces against the existing Government.

One or two serious plots which had been formed have already been discovered and thwarted. The Government has positive information that a minority element in the army, and also in the navy to a lesser degree, is willing to support the opposition policy by armed force and revolution.

The dissidents are mostly younger officers and some enlisted men, the older officers, for the most part, with few exceptions, being loyal to the Government and desirous of seeing good order maintained.

The Government is acting with great energy and the armed forces, army and navy at Rio de Janeiro, are kept in constant readiness, practically sleeping under arms. Quite a number of changes in officer personnel have recently been made in order to insure that those in positions of command are loyal.

Recently a number of enlisted men on the two battleships have, at different times, been arrested, taken ashore and imprisoned, their disposition being unknown to their remaining comrades. This latter action, however, is said to be due to the relations of the men arrested to Bolshevick elements which exist in Rio de Janeiro, rather than any activity in the present political campaign.

BRAZILIAN FURNACE GRATE BAR.

25 April, 1922.

There has been invented and patented in Brazil an improved form of grate bar for use in burning low-grade and powdered coal. It has been tested for six months in a Chilean destroyer and obtained a decrease in fuel consumption varying from 30 to 60 per cent. It has also been tested for a year in the boilers of a brewery in Santiago, Chile, with like results.

The details are, for the present, secret, but a demonstration is to be given in Rio de Janeiro within a few months.

BRITISH NAVAL AND MILITARY POLICY.

12 May, 1922.

Great Britain now, as in the past, depends on her navy, due to its preponderance of power, as a first line of defense, against an invasion of the United Kingdom, and for control of the sea to enable her to maintain her lines of supply. The navy is further depended on as a defense behind which a suitable army to form an expeditionary force can be organized. This practice enables England to maintain a much smaller standing army than would otherwise be possible. With the removal of Germany as a naval menace, England is now able to uphold this policy with only one large fleet in home waters.

The advent of combat aircraft has caused a large school of opinion in England. Some hold that aircraft will be of much greater worth in operations against hostile savage or semisavage uprisings than ground troops, both in the rapidity with which the enemy can be searched out and attacked, and in the considerable less numbers involved in attacking from the air. Great Britain shows every determination to have a preponderance of air power, both for protection of the United Kingdom from hostile air attacks, and the control of air routes in the same way that her navy and colonial fortifications control coaling stations on her sea routes.

EDITORIAL COMMENT ON FRENCH AND BRITISH NAVAL POLICIES.

11 May, 1922.

The following article appeared in the Naval and Military Record of 3 May, 1922, having been written by their Paris correspondent.

It is believed that it will be of considerable interest in indicating the present trend of French naval policy, and also in connection with reference to English light-cruiser fleet:

Among thoughtful men on both sides of the Channel, especially in military and naval circles, it is clearly realized that the welfare of Europe and the future of civilization depends on the maintenance of a close Franco-British entente cordiale, this being the only barrier between Europe and Bolshevist anarchy under Boche control. Hence the growing anxiety at the ways of the Genoa mischief-making conference. The now official Germano-Russian alliance is the first fruit of that dangerous "new era diplomacy;" very shortsighted those who see in it nothing more than an anti-French machine of war and who think that the crushing of France by Bocho-Bolshevist hordes would add to British greatness. The Washington affaire was felt here to be an unfair, disloyal blow aimed at the French Navy; the Genoa farce is filling to overflowing the cup of French bitterness; in popular eyes it is nothing more than a cynical piece of betrayal of France by her nominal allies. President Poincaré spoke words of warning; peaceful, loyal, but proud and hercic, France is utterly sick of being bullied and slandered. She will enforce her treaty rights.

The *British cruiser policy* is the object of a eulogistic essay in the current number of the leading French naval review, the Paris Yacht (Croiseurs Legers: les enseignements de la guerre; April 22). The wisdom of the fighting principles formulated by Admirals Lord Fisher and Sir Percy Scott (quality matters more than quantity; hit first and hit hard) is held to have been amply demonstrated by the experience of the real thing; the disastrous blunder of the Boches in sticking to the inferior 4.5-inch caliber for their light cruisers is especially insisted upon; and it is noted the at the moment of the armistice the enemy was feverishly attempting at repairing past mistakes by mounting 8.2-inch guns in his 1918 armored scouts, and so securing the superiority for range. "Tout dans la rivalite maritime se ramene a une lutte de vitesse et de portee, du moins en ce qui concerne les batiments de surface."

Admiration is expressed for the *gradual growth of the English light cruiser fleet that has developed in conformity with "un plan muri par des chefs penetres des realites de la guerre sur mer," which assures to England an enormous lead over the combined navies of the world,* and, it is remarked, is for much in the robust and smiling confidence with which English officers envisage the prospects of European complications. The weight *in the balance of the 80 light British cruisers* is deemed to be a credit not only to the financial and shipbuilding capabilities of Great Britain, but also, and to a greater extent, to the inventive genius and technical excellence of British constructors.

By contrast Le Yacht pours bitter sarcasm on the powerlessness of the French Republic at protecting the vast colonial Empire which secular efforts and sacrifices have conquered and which alone a strong marine can exploit and guard. *Whilst aerial and submarine flotillas can render coastal services, fast and well-armed cruisers,* susceptible of extending their radius of action in every sea, are considered *to be necessary if communications are to be maintained* in war time with France's colonial possessions. The war has shown that no power, not even England, possessed anything like the *number of cruisers*

required for its needs. *Since the time when Nelson kept assailing the London Admiralty with his demands for more frigates the call for light vessels has increased tremendously*, as the consequence mostly of submarine and poussiere navale developments. As both individual strength and numbers are necessary to produce cruiser efficiency, improved, more robust contre-torpilleurs of the Amiral-Senes type of some 2.700 tons ought, it is urged, to be built in adequate quality to reinforce the cruiser squadrons.

As to the future French cruisers, that are too costly to become very numerous, they ought, it is again urged, to possess the supremacy of quality—that is, *combined speed and caliber superiority.*

The 34-knot and 8-gun (150 mil.) 8,000-ton cruisers of the 1922 program fall rather short of these ideal desiderata, though their superior speed is a good point. The Courrier de St. Nazaire deplores their weak armament as a grievous blunder in contradiction with the most obvious lessons of the war and that will prevent their adding much to the sadly-compromised prestige of the French Navy. At this time of the day, and considering the peculiar conditions of cruiser encounters, a battery of five 7.6-inch guns (115 kilos projectiles) is deemed much superior to one of eight new 6-inch weapons, tried for the first time in the French Navy. It is urged that for the next three cruisers a displacement of 10,000 tons be adopted with an armament of six 194 mil. *guns of 50 or 55 calibers*, which would cause *all Mediterranean scouts to be outclassed in the matter of range.*

Private dockyards are dissatisfied with their share of the naval program. To quiet them Rue Royale has issued a communique demonstrating that in reality the lion's share in the contracts just awarded goes to private firms that are harvesting 650 million francs out of a total 755 millions, as there will be entrusted to them, in addition to 30,000 warship tons, the *24 armored turrets* and the motors of the cruisers ordered in Brest and Lorient, and no end of other machinery and equipment. A young officer de vaisseau who had the privilege of surveying and discussing the *Hood*, king of battle cruisers, expressed great admiration for the engineering skill and shipbuilding capabilities that have produced that masterpiece of ocean warfare, and in glowing terms he pictured the rôle which a powerfully-armed and thickly-armored mastodon of that class would have played in the hands of a Sturdee or of a Beatty at Falklands or at Dogger Bank: "It is the best strategic weapon ever designed, and a successful compromise between those contradictory desiderata which speed and defensive power are; but at what cost, o Seigneur! Only England and the peace-loving States of America can afford to rule the oceans at so tremendous a price, and to put so many eggs into so precious a basket For 'Imperialistic' France, that has neither the wish nor the means of 'bossing the show', the splendid *Hood* would represent a cumbrous and highly undesirable piece of naval furniture. From a tactical standpoint, and notwithstanding all her qualities, she offers too big, much too big a target to aerial bombs and underwater torpedoes. The experiments with bombs and torpedoes in the *Prinz Eugen*, and also the tests with *new armor-piercing and chemical shells* in the *Thueringen*, have convinced all eye witnesses, and especially the committee ingenieurs in possession of the full data, of the damaging inferiority which large size in modern warships entail under the actual conditions of warfare. It is folly to shut one's eyes to facts; armor can no longer be said to protect warships, save, of course, in a moral sense, and literary argumentation is a still poorer substitute. The primary condition of efficiency, voyez-vous is to keep up with the times, and, if possible, to move in advance of them, looking ahead instead of backward.

"The past, naturally, will always have its worshippers sighing and grunting

at the folly of innovations, and in their inner hearts petting the relics or ancient warfare, and shedding tears of attendrissement on the heroism of those brilliants jeune officiers who are plunging head and crop into the deep study of tactics and strategy in prehistoric times, instead of devoting their attention to the requirements of to-day and of to-morrow. It is that senile 'tom-foolery' that has filled the upper ranks of the service with 'officiers tres instruits,' just like Villeneuve de Trafalgar was, but without the seamanlike and fighting 'caractere' that make the true naval leader; and yet it is great fun to me to behold these worthies ascend with record speed and legitimate pride the hierarchical ladder, every one preciously squeezing under his left arm the savant treatises on the rowing and sailing eras that represent his all-in-all! The blossoming, or rather the blooming, of these noteworthy tendencies has given us an exceedingly learned archaeological Academic de Marine that is our great consolation for having no more fleet. * * * Well, if I were to tell those erudite gentlemen that in the case of a duel between an up-to-date bombing seaplane and the great *Hood*, a gnat against a lion, I would bet for the elusive and venomous mosquito of the air, you would see them all faint. * * * and yet it is the simple truth."

My young friend was getting rather excited, obviously under the inspiration of the Jeune Ecole doctrine, so I changed subject. Extreme opinions of this sort are gaining ground among younger officers, and it is, strange to note, partly the result of the general feeling of exasperatiaon at the unjust manner in which the French Navy has been treated at the Washington Conference. Previous to that unfortunate affair the intention in Rue Royale circles was to gradually reconstruct the battle fleet with 18-inch gun ships, and, of course, many years would have elapsed before a complete French battle squadron could have become available, and besides the flotillas would have been neglected, which would have meant powerlessness to the French Navy for years to come. The Washington farce, whether Parliament approves it or not, will have the effect of altogether changing France's naval policy; the partisans of battleships are now nowhere; *the demand is for quickly-built submarine and aerial flotillas capable of showing to the world* that no Boche-fed campaign of slander and intimidation can make peaceful but independent France renounce her vital rights.

THE BATTLE ON THE DOGGER BANK.

Source: German Officer.

An unexampled agglomeration of naval forces in the North Sea preceded the Great War. With the outbreak of the latter, the whole world looked forward to a tremendous unloading of forces which would put all previous events in naval history in the shade. But nothing of the kind happened. The great decision came in the west without the naval forces having had any appreciable influence in bringing it about. It is true that the activities of the German submarines expedited the fall of Antwerp and helped in taking and protecting the coast of Flanders by interrupting the transport of English troops; it also effected the attack of the German battle cruisers against Yarmouth; however, a really balancing influence in the struggle for the British Channel position was never exercised by our High Seas Fleet, which was escheloned behind the right wing of the western

front. In accordance with orders which temporarily prevented the fleet from taking full risk, it remained stationary during the decisive battles in the west. When an offensive (albeit only a partial one) began in the North Sea with the attacks against the British coast in November and December, 1914, this had no connection whatsoever with the strategic situation existing on the land front. There the most important decisions had long ago occurred and had gripped the lines in a deadlock.

For the German North Sea forces December and the beginning of January passed in expectation of a probable impending British attack against the mouths of the German rivers, even though there was no strategical necessity for same. When this did not take place, it was evident that the weeks of acute preparedness had not failed to leave their mark on the fleet. Urgently necessary maneuvers of the Third Squadron and several torpedo-boat flotillas and repairs on several other ships which could no longer be delayed made it necessary to interrupt this state of preparedness to such an extent that any thought of any initiative in an undertaking in the existing state of weakness was absolutely and entirely out of the question.

But though weeks of bad weather had nipped several contemplated undertakings in the bud, an improvement in things now began and gave rise to the Admiralty undertaking an operation when the Third Squadron had scarcely left for the Baltic, which, much against their will, would lead to the first encounter of large battleships in the North Sea. The proposal of the chief of staff, Vice Admiral Eckermann, read as follows:

If the weather to-morrow is the same as it is this afternoon and evening, an advance of the cruisers and flotillas to the Dogger Bank would, in my opinion, be very desirable. Special preparations are not necessary. An order need only be sent early to-morrow to the commanding officer of the reconnaissance ships. You leave during the night, are there in the morning, and return again in the evening.

Admiral von Ingenohl immediately opposed this on the ground of the fleet's lack of preparedness at the time and expressed his opinion in the following marginal notation:

I would much prefer, if such advances are to be made, that the fleet go along. At the present time this is unfortunately out of the question.

However, he gave his approval for the advance. As he stated in a report made after the battle, his approval was based on the following grounds:

The operation against the Dogger Bank was planned for some time. The execution of same was, however, always prevented by special circumstances. It required an extensive torpedo-boat advance supported by cruisers, a cleaning away of all the enemy fishing vessels in the way to the Dogger Bank, and a propitious surprising of the light advance outposts of the enemy forces, such as were encountered on the occasion of the last advance against the eastern

coast. For the first time in a long while, the weather was favorable and the torpedo boats could go along. Shortly before, on the 19th of January, the English fleet had shown itself in the German bay. It could therefore be assumed that in consideration of the lighter forces accompanying the fleet they had now put back to their harbors for coal. According to the reports, their dislocation seemed to be about as follows: The battle cruisers in Scapa Flow to frustrate any attempt on the part of the German cruisers to break through for the carrying on of the commercial war, part of the heavy naval forces in the Firth of Forth and part in the Thames. Therefore it seemed that a small operation against the Dogger Bank by light cruisers could be carried through unhesitatingly. Under these premises the support of the heavy forces was not necessary during a short advance; it would, in fact, probably be detrimental on account of the increased danger through a previous announcement to the enemy. At this time a more comprehensive undertaking with the idea of engaging parts of the enemy's battle fleet in action was out of the question, as the Third Squadron had been sent to the Baltic.

Everything would have gone according to these expectations if, as we now know, the British Admiralty (even as during the advance against the British east coast on December 16, 1914) had not continuously caught the German wireless messages and almost entirely deciphered them. It now appears from the account of a Russian naval officer in Petrograd that at the time of the stranding of the *Magdeburg* near Odensholm (August 26, 1914) the codes which had been thrown overboard were fished out by the Russians and placed at the disposition of the Entente. We were therefore playing with all our cards face up on the table, while we were completely in the dark as to what the enemy was doing.

Therefore this relaxation on the part of the German High Seas Fleet from the state of maximum preparedness which arose after the 20th of January was no secret to the English. This turn of affairs also seemed to offer the possibility of granting a very much needed rest to the Grand Fleet. An especially rigid guarding of the German Bay by submarines east and west of Helgoland and in front of the Ems, as well as a reconnaissance cruise of the Harwich forces which was planned for the 23d of January, was to protect the fleet from any surprises during this period. The flagship, the *Iron Duke*, had already received orders to dock in Cromarty, during which time Admiral Jellicoe was to have a short shore leave, when reports reached the Admiralty on the morning of January 23 which set in motion the entire machinery for the protection of the English coast, such as was arranged for after the German attack on Yarmouth, Hartlepool, and Scarborough. In the early part of the afternoon of this same day, Admirals Jellicoe and Beatty, as well as the chief of the Third British Battle Squadron and Commodore T., all received simultaneously the following telegram from the Admiralty:

Four German battle cruisers, 6 light cruisers, and 22 destroyers will put out to sea this evening for a reconnoitering expedition against the Dogger Bank.

Return probably to-morrow evening. All available battle cruisers, light cruisers, and destroyers from the Rosyth should advance to a point de réunion in 55° 13′ north, 3° 12′ east. Arrive there to-morrow morning 8 a. m. Commodore T. should advance from Harwich with all available destroyers and light cruisers in order to join forces with the vice admiral of the *Lion* at 8 a. m. at the above-mentioned point. (The time given is central European time—that is, mean Greenwich time, plus one hours.) If Commodore T. sights the enemy during his advance, he should open fire. Wireless should only be used in the most urgent cases.

The German battle cruisers had therefore scarcely left the Jade when the British had also weighed anchor in the Firth of Forth (7 p. m.). The Third Battle Squadron and Third Cruiser Squadron followed at 9.30 and were to remain well north of the rendezvous indicated, in order to catch any forces breaking away to the north, while the Grand Fleet from Scapa and Cromarty should make for the latitude of Aberdeen from the already mentioned point halfway between the Scottish and Jutland coasts. At the same time, during the dense fog, Commodore Tyrwhitt set out from Harwich with the cruisers *Arethusa*, *Aurora*, *Undaunted*, and all the destroyers which were in readiness, in order to reach the northeastern part of the Dogger Bank at dawn, while Commoder Keyos, with the destroyers *Firedrake*, *Lurcher*, and four submarines advanced to the east in order to proceed against Helgoland and the mouth of the Ems. Whether the English measures were only due to the rapid deciphering of the German wireless orders or whether the reports sent out considerably earlier by the German Admiralty at the request of the fleet relative to an impending German attack against the Humber in order to decoy the British forces to the mine area located there had something to do with the matter is uncertain. However, it is absolutely certain that the reports were late in reaching England and arrived there practically simultaneously with the German advance.

The night passed without any special occurrences for either side and nothing warned the German commander, Vice Admiral Hipper, of what was awaiting him. No airship accompanied him, although three were in readiness in Puhlbüttel and Nordholz, and only at dawn did one of these leave. It came too late, however, to protect the German cruisers from surprises. As it began to dawn at 8 o'clock, the British ships had already reached the rendezvous. With the certain expectation of encountering the enemy, Admiral Beatty ordered ships clear for action. A few moments later the flash of gunfire in the southeast showed that the Harwich forces had encountered the enemy. On account of the fog the forces spread out a great deal, so that at 8 a. m. the *Arethusa*, with six destroyers of the M class, was 13 nautical miles nearer Beatty's forces than the *Undaunted*, with 13 destroyers, and the *Aurora*, east of the latter, with 15 destroyers. At 8.10 a. m. the *Kolberg* (Commander Widenmann)

advanced from the starboard flank of the German battle cruisers on the *Aurora*, and after a short battle, in which the *Kolberg* was struck once and the British cruiser three times, both rejoined their heavy forces. At the flash of the fire Admiral Hipper advanced immediately on the *Kolberg* with the utmost speed, dropped back, however, in accordance with an old cruiser regulation, as the latter was out of danger, in order to get a survey of the situation before taking any further action. At the same time the light forces gathered at the head of the battle cruisers. While the *Stralsund* (Commander Harder) reported further smoke clouds to north-northwest and believed this to represent eight large ships, according to the battle report of Admiral Hipper, the following picture was presented to the *Seydlitz* (Commander von Egidy):

> Astern on starboard side 4 *Chathams*, astern numerous destroyers under guide of 3 small destroyers of the *Arethusa* class. Upon demand, *Blucher* reported in all 7 small cruisers and 26 destroyers and behind them further smoke clouds.

The report continued as follows:

> The presence of such a numerous force indicated the presence of further portions of the English Fleet; also, considering the wireless names used, which are the same as those noted on December 16, the presence of the Second Battle Squadron can also be safely assumed. Therefore the fleet was ordered to approach the German bay at full speed and only seek contact with the enemy later on.

While the *Blucher* (Commander Erdmann) successfully repulsed several advancing destroyers of the M-class, on the starboard side, and the First British Light Cruiser Squadron pulled out farther to the east at 9.35 in west-northwest, five British battle cruisers—*Lion*, *Tiger*, *Princess*, *Royal*, *New Zealand*, and *Indomitable*—appeared in sight on the starboard side astern. The supposition that these were not alone, but that further heavy forces followed them, impelled the German commanders to avoid action as long as possible, and then only hold them at bay until in approaching the German bay they might be supported by their own forces. Admiral Beatty, on the contrary, feeling he was supported by the Third Battle Squadron and in a way by the Grand Fleet itself, desired to cut off the German forces, which had so surprisingly presented themselves for battle and which were so far inferior in number, from their bases, or at least get them in a leeward position, which was so favorable for their artillery. When Admiral Jellicoe received his first report of the sighting of the enemy, he, with his three battle and three cruiser squadrons, was still 150 nautical miles north-northwest of the territory in which the battle began. Even though the plan of a timely concentration of superior forces against the Germans was in no way completely successful, nevertheless on account of the vast

superiority of the English intelligence service their strategical advantage was still great enough.

The first reports of the German cruisers were completely surprising to Admiral von Ingewohl. Anchored at the outpost beyond the mine fields of the Jade, there was by chance only the weak Second Squadron, consisting at the time of five old-line ships, with the twelfth half flotilla, which was ready for advance.

On the Weser and the Elbe there were two further half flotillas, the second fifth, on outpost duty. Five vessels of the First Squadron lay in the Wilhelmshaven Roads, but could only weigh anchor two hours later. The delays were even greater for the vessels and flotillas lying in harbor. Therefore a general advance of the First and Second Squadrons for taking on the cruisers could scarcely be expected before noon. The submarines, however, received orders immediately to advance on the enemy. The commanders of the second and third submarine half-flotillas (Lieutenant Commander Spindler and Lieutenant Gayer) had not awaited these orders, and therefore at 11 a. m. the *U–19*, and soon afterwards the *U–32*, were advancing from the Ems toward a point some 40 nautical miles north of Terschelling and about 5 nautical miles south of the contemplated line of the battle cruisers, while *T–99* with *U–35*, *U–17*, *and U–14* advanced from Helgoland toward the open breach near Nordeney. Besides these naval forces since 10 a. m. *L–5*, and somewhat later the airplane 83 were en route to the scene of action.

In the meantime, the battle had begun on the Dogger Bank. At 9.34 the signal "Speed 27 knots" was given from the *Lion*. At 9.43 the admiral ordered 28, and at 9.52, even 29 knots. According to the account of Felson Young this did not mean that this speed could actually be attained by the vessels, with the possible exception of *Tiger*, but the admiral deemed it advisable to give the engineering personnel the highest possible figure. The ships therefore really performed marvels, and even though the Second Battle Cruiser Squadron slowly dropped astern, nevertheless it remained—thanks to the efforts of the *Indomitable*—in tactical connection with the three ships of the first squadron of battle cruisers. On the other hand, the high speed of the large battleships no longer allowed the lighter forces to take their position at the head of the battle cruisers which was necessary for their incorporation as a component part of the impending battle; even the most rapid destroyers of the M class had to fall back to the *Arethusa* with the slower destroyers.

The point of view has long been current in Germany that the British opened fire very much earlier than the Germans. The actual facts of the matter are as follows: At 9.52 the distance appeared to be about 200 hectometers, the approximate range of the heavy British guns, and the *Lion* fired the first shot for battering in the *Blucher*.

It fell short. At 9.54, Beatty escheloned the battle cruisers astern in conformity with the battle line, in order to be able to reach the target with all the guns, and at 10 o'clock the *Tiger* also began firing on the enemy, but it was not until 10.05 that the admiral gave the signal to open fire in general. The *Princess Royal* now also joined in the fire that for the time being was directed solely against the *Blucher*. The first shots fell short 1,000 meters and 1,500 meters, and only at 10 12 were long-distance shots signalled by the *Moltke* (Captain von Levetzow). On account of the slowness with which the three head British ships fired, the shots had no effect, until at 10.09 the signal for opening fire was also given on the *Seydlitz* after the German battle cruisers, already seven minutes before, had taken the southern bearing, so that all the guns would carry. On account of the difficulty in getting the target on account of the heavy smoke screen, the *Derfflinger* (Captain von Reuter) was the only vessel which could obey this order immediately. A minute later (10.12) *Lion* succeeded for the first time in striking the *Blucher* (in the forecastle between the two anchors) without any great result. At 10.14, after the *Derfflinger* had opened fire, the *Lion* changed and directed fire to the right against the *Moltke*, while *Tiger* and *Princess Royal* continued temporarily to fire on the *Blucher*. Only now did the return fire begin—the *Blucher* at 10.18, the *Seydlitz* at 10.19, and by the *Moltke* at 10.20. Although the order was given to direct the fire from the left, the German fire in the main concentrated on the two head ships of the enemy, because these showed up more plainly out of the smoke. There was no question of a really systematic distribution of fire later on. Each ship fired on the target which lay most advantageously for its guns and which could be seen most distinctly. On account of the enemy's position astern, the front turrets were often obliged to be silent, and sometimes fire was directed from the rear. At 10.21 the *Lion* was struck, and the *Seydlitz* four minutes later, without either vessel being put out of fighting commission. At 10.35, the *Lion*, sheering off temporarily, passed over 200 hectometers out of range. The *Tiger* was struck at 10.38 at a distance between 160 and 170 hectometers, which resulted in a fire lasting some length of time, but this was really only caused by the deck boats catching fire.

The turning off of the English was, according to their own statements, less due to the effect of the artillery than to the fact that Admiral Beatty always feared an attack on the part of the German torpedo boats against his head ships, which were not protected by destroyers. The anticipated attack, however, did not occur, and at 10.35 the artillery battle broke out anew. With the British battle cruisers the order now was to distribute fire, ship against ship, but the *Indomitable* was too far back to reach her target, and the *Moltke*

was not fired at because, contrary to the order, the *Tiger* also fired on the *Seydlitz*. However, her fire did not count for much, as for the most part it passed far beyond her opponent.

The battle soon approached its climax. At 10.43 the *Seydlitz* was seriously hit. A 34-centimeter shell struck the 230-millimeter Barbette armor plate of the rear turret, and although it did not penetrate it, it broke out a piece of the plate, which, flying in a red-hot condition, ignited a cartridge. The result is too well known to need any further description here; both turrets burned out, and only the immediate flooding of the ammunition room saved the ship from a worse fate. Almost immediately following this a shell penetrated to the ammunition room of the *Lion*, but—an unfortunate accident—it shattered before exploding. Hardly 10 minutes later another shell struck the turret deck of the *Lion* and put one of the guns out of commission; then a shell fired from the *Seydlitz* penetrated the armor and into the engine room. Water flooded two dynamo engines so that the current for the rear fire control and the light artillery was broken. The British flagship began to put about to starboard.

In the meantime Admiral Beatty had reduced the speed to 24 knots in order to bring the squadron closer together, as the distance between the *Tiger* and *Princess Royal* had already increased considerably, and there was even a greater space between the latter and the *New Zealand*. On account of the rapidly increasing distance, the British cruisers were relieved a little, while the *Blucher* had to ward off several destroyers of the M class and the ships of the I light cruiser squadron approaching on the starboard side. However, these were quickly thrown off by a few salvos of the central artillery of the German cruisers. At 11.10 Admiral Beatty again increased the speed to 26 knots, but the English were scarcely within fighting range when their flagship was again struck—this time by two shells simultaneously (11.18). One of these pressed two plates of the armor belt through the wooden backing; the other penetrated the armor at the water line, burst in the torpedo broadside room, and in a few moments this, with all the adjoining compartments up to the main deck, stood under water. Such an effect of the German artillery could only have been averted by the English cruisers, by the latter trusting in their superiority in numbers, speed, and gun caliber, approaching closer to the enemy and forcing a decision. But, as was stated in the official report of the battle, this was prevented by the presence of the German torpedo boats, which were erroneously imputed with the laying of mines in the German line of retreat. Therefore, getting into their wake was to be avoided under all circumstances. The English efforts were therefore directed toward overtaking the enemy to lee and in this way force him toward the

north and against the Grand Fleet. In their relative positions this seemed quite possible—it was already early in the day, they were still over 100 nautical miles from Helgoland, and the *Blucher* already began to show appreciable effects of the British fire.

As a matter of fact, a shell struck this ship at 11.25, which sealed its fate. As far as can be learned from the statements of the survivors, this shell struck the cruiser, breaking through the deck in its most sensitive place—the ammunition chute extending for two-thirds of its length—a device which was on the *Blucher* only as an experiment. The cartridges ignited, one after another, and flames burst through the shell chutes into the front side turrets, which—even as on the *Seydlitz*—immediately burst into a sea of flames. All fire-control apparatus, commanding elements and the rudder gear were put out of commission, shell splinters penetrating the main steam piping in the third boiler room so that the speed fell to 17 knots. Now, the moment seemed to the British admiral to have arrived for approaching closer. But he had scarcely begun this when, according to the English report, "shell after shell" struck the *Lion*. Between the time of 11.35 and 11.50 the ship was struck no less than six times. The armor belt was again penetrated so that the cruiser made more water; then a shell exploded in the forward compartment of the ammunition room of turret A (11.45). The room itself burst into flames and the fate of the three British battle cruisers which blew up in the Battle of Skagerrak would have been fulfilled if, at the last moment, the chamber had not been flooded. At this time the speed of the *Lion* had decreased to such a degree that the *Tiger* began to overtake the flagship. But between 11.49 and 11.52 the latter received the decisive hit. At this time she was shattered from stem to stern by a shell which, striking at the height of one of the boiler rooms, pressed the armor belt in and caused so much damage to the drinking-water tank and the port engine that they had to be stopped. Besides this, a short circuit shut off the light and electric power and the vessel listed to port 10°. The battle cruiser was unable to make more than 15 knots, and she had to sheer off and leave the pursuit of the enemy to the others. Almost simultaneously with the last hit admiral sighted enemy submarines to starboard—which might not have been the fact—and, as a result, at 11.54 he ordered a turning 10 points to starboard, but since this movement would have assured the Germans too great an advance, two minutes later he gave the course signal northeast, not only to avoid the wake of the German torpedo boats but to cut off the *Blucher* from the other German ships and, if possible, cause the enemy to come abreast or bring the broadside to bear.

Admiral Hipper, although he did not overlook the full effect of the German fire on the head ship of the enemy, had actually deter-

mined on this. At 11.58—that is, four minutes after the English had started to turn—he turned southeast to south to the middle line, and at 12 gave the order to attack the torpedo boats. But since he at the same time as the battle cruisers turned to the enemy ever more to the south, while the British ships at a greater distance (with *Tiger* now apparently at the head) turned direct to the north, the prospects for an attack seemed so unfavorable on account of the great distances that the boats were immediately called back in order to avoid a useless risk. The German cruisers were now already south to west in order, by taking a circular form, to come to the aid of the *Blucher* lying 4 nautical miles to the north in the very midst of the fray. At this moment the admiral was informed that the two rear turrets of the *Seydlitz* had definitely fallen out, that only 200 rounds of ammunition were left, and that there were 600 tons of water in the aft part of the ship. The German commander was therefore forced to make a very weighty decision. The following excerpt from his report will show how he viewed the situation:

> Further supporting of H. M. S. *Blucher* by retaining the circular form of battle would have brought the first reconnaissance group between the English battle cruisers and the squadron of line ships probably behind them. This would have brought our own head, after having gradually reached a northern course, in a very unfavorable position to the enemy destroyers. Supporting them in a running fight at a northerly course, which was also taken into consideration, would have brought the same disadvantageous position to the destroyers which are concentrating in the north and are advancing on the *Blucher*. In the ever-increasing distance from our own coast, any damage to a cruiser's machinery would lead to its destruction without the *Blucher* being helped in any way, for the battle between the battle cruiser groups took place during the most rapid movement. This might have passed by the damaged ship so badly in need of assistance, but it would not have prevented the small cruisers and destroyers of the enemy, far superior in numbers and strength to our own forces, from putting the damaged ship out of commission in the meantime.

Under these circumstances to seek to renew the battle which was broken off by the enemy, and considering the probable heavy forces behind the enemy and the lack of any support, would really have been risking everything. Actually, the Third British Battle Squadron at the time was out of sight of the German ships and couldn't under any circumstances be at the scene of battle before 3 o'clock in the afternoon. The airship *L-5* stood over the German lines since noon but devoted its attention almost exclusively to the *Blucher*, while for the German commanders it would have been far more important to know whether British forces still lay outside the range of vision with the existent possibility of soon joining in the battle. As a result, nothing occurred which could tend to lead the German commander to change his opinion in connection with this point.

Therefore, with a heavy heart, he saw himself obliged, at 12.12, to turn away from the enemy and direct his course toward Nordeney. After a few salvos firing ceased between the two lines. Soon afterwards the destroyers of the M class attacked the *Blucher* but were repulsed by a lively rapid fire from the ship which was defending herself so madly. The *Meteor* was struck in the front boiler room, which set the fuel oil on fire. Then not only the destroyer but also the battle cruiser *Tiger*, which for the observer on the rear ships of the German middle line (line ahead) was at this time directly in deck bearing to the destroyer, were covered by a gigantic column of smoke and flames. As a result the Germans had the impression that the *Tiger* sank at this time. This came about, as was shown later, by one of the torpedo boats, the *V–5*, which had temporarily remained behind on account of damage to her machinery, having fired a torpedo twice, presumably against the *Tiger*, and the *L–5* replied, upon inquiry, that there were only 4 enemy battle cruisers in sight. This was correct, only the airship had failed to count the *Lion* previously, as from the beginning the latter had not been in its range of vision. Therefore it was in the best of faith that the Germans at that time counted definitely on the destruction of the *Tiger*.

The actual occurrences on the British side after the dropping out of the *Lion* have only been made known to us through the appearance of the second volume of Corbett's Naval Operations and the more detailed report in the admirable book by Filson Young, With the Battle Cruisers. With the falling out of the British flagship, the command of the battle cruisers fell to Admiral Moore of the *New Zealand*. But for the latter on his ship as No. 4 standing far to the back, the purpose of the last movements toward the north of the cruisers in front of him was not clear. On the other hand, it was no longer possible for Admiral Beatty from the flagship which was rapidly dropping astern and was deprived almost completely not only of the wireless but all other means of signalling, to communicate his intentions to the second admiral. But in order to give some directions for the further course of the battle, he raised two short signals on his last two flag lines, of which the first read: "Attack the enemy's rear," and the second which had been given at Trafalgar, albeit with better results, was, "Keep closer to the enemy." Unfortunately for the English, the direction of the wind made signalling difficult. The first signal was probably raised before the course signal northeast had been taken down. Therefore, it was understood by the *New Zealand*, *Tiger*, and *Indomitable* that the enemy's rear should be attacked in the direction northeast. But there, there was only the *Blucher*. They, therefore, broke off the battle against the *Seydlitz*, *Moltke*, and *Derfflinger* and turned to

the *Blucher*, although the last signal, "Keep closer to the enemy," could no longer be read by any of them. Judging from the form alone, the further decisions of the assistant admiral and the commanders could possibly be viewed as justified, but they were hardly in keeping with the actual conditions of the battle. In order to destroy the badly disabled German armored cruiser, the *Indomitable*, as originally intended, would have been amply sufficient.

Subjected to the fire of all the British battle cruisers, the *Blucher* fought for the honor of the flag. The manner in which she did this is described in the official British account (Corbett Naval Operations, vol. II, p. 98) in the following words—excerpt translated from the German:

> For three hours during which the ship was the center of an overpowering concentration of fire, she did not cease for a single moment to answer the fire. Twice our light cruisers advanced in order to complete her destruction, and twice she forced them to retire. As an example of discipline, courage, and military spirit, her conduct during the hours of her destruction has seldom been surpassed.

At 12.45 the destruction of the ship seemed absolutely certain, so that Admiral Moore was confronted with the question as to whether he should return to the *Lion*, which no longer answered wireless calls, or should follow the German battle cruisers. He was at this time still 80 nautical miles from Helgoland, but since the battle could not be resumed again before two hours he would have to remain close to the island and not only be in the territory of the German submarines but also in the proximity of the High Seas Fleet, which, according to the wireless message of a British submarine, had already started out. Since he must also reckon with the possibility of damaged ships being subjected during the night to attacks by German torpedo boats, he considered it better to return to the *Lion*. But already at 1 o'clock Admiral Beatty met him on the destroyer *Attack*, raised his flag on the *Princess Royal*, and immediately gave the order to advance in the direction of Helgoland. But he also soon saw that the critical half hour was lost, and nothing remained but to cover the retreat of the badly damaged *Lion*. On the way to the latter, he still believed he sighted enemy submarines, which did not seem the most promising outlook, as the *Lion* was only making 12 knots, and finally had to stop altogether and be taken in tow by the *Indomitable*. At 3.30 the Third Battle Squadron joined the battle cruisers, and an hour later the Grand Fleet appeared. The idea of sending at least a destroyer flotilla against the oncoming German High Seas Fleet was finally given up in order, with all the flotillas and the First and Second Light Cruiser Squadrons, to protect the "tow," headed toward Rosyth, while the Grand Fleet and the battle cruisers went toward the north in order to get out of reach

of the absolutely certain attack of German torpedo boats as quickly as possible.

As a matter of fact, after the breaking off of the fight, the Germans did consider sending out torpedo boats during the night against the enemy, who were withdrawing toward the northwest. But since the flotillas accompanying the battle cruisers could no longer be considered in this connection on account of the lack of fuel, the first flotilla and sixteenth half flotilla, with the advancing line ships (squadron), were to be used for this task. On account of the bright, clear night these had to reckon on considerable counteraction from the numerous light forces of the enemy, and were therefore to be convoyed by cruisers of the second reconnaissance group. A further requirement for success in the undertaking, and one which could be ascertained, was whether the speed of the enemy ships had been materially reduced. Unfortunately, however, as already mentioned, *L–5* had never sighted the cruiser *Lion*, and replied in the negative when asked whether any diminution in the enemy's speed had been established. Thereupon the contemplated attack was abandoned.

Of the submarines, only the *U–35* and *W–17* were sent out against the enemy during the night. In the morning they were to try to attack incoming British ships at the entrance to the Humber, as the chief of the submarine half flotilla (Lieutenant Commander Spindler) had the idea that the enemy's damaged ships would steer for this harbor as the nearest. Only the *U–35* (Lieutenant Kophamel) reached the Humber, and then nearly 12 hours later than expected, after the damaged *Meteor* had in the meantime been towed in by the destroyer *Liberty*. On the same day the line ship *Britannia* ran aground in the fog when entering the Firth of Forth. She was tied up for almost 36 hours and afterwards was out of commission for a long time on account of the repairs that had to be made. It was only at dawn of the 26th of January that the *Lion* was able, with great difficulties and with the help of tugs, to be brought to anchor in the Firth of Forth. This finished the operation.

The battle of January 24, 1915, was the first encounter between large battleships in the war and in this regard was of great value for the appraisement of the military and technical capacities of both parties, even though the superiority of the German battle cruisers in their central artillery and their especially effective torpedo armament did not find expression on account of the conditions surrounding the battle. If one draws a comparison between the ships which opposed each other in the artillery battle, as regards their displacement (tons) and the weight (shell) of the broadside of their heavy artillery (kilograms), it is found that the total displacement of the German battle cruisers amounted to 90,400 tons as compared with the 132,400 tons of the British, and that the weight of a German

broadside at 10,144 kilograms was exactly doubled by the British 20,320 kilograms. In spite of the approximately equal number of shots (approximately 950) during the course of the battle, the Germans fired 328 tons of heavy shells as compared with the 508 tons of the British. If the close-up battle against the *Blucher* is excepted, then the Germans hold the record for the greatest number of hits. It is true that on account of the smoke screen, the British battle cruisers behind the *Tiger* were not struck, nevertheless *Tiger* received at least 2 and *Lion* (according to Filson Young) no less than 18. The English only had a total of 4 hits (*Seydlitz* 2, *Derfflinger* 1, *Blucher* 1) as compared with the German record of 20.

There is no doubt whatsoever that under the impression of the enemy's greater caliber, the loss of the *Blucher*, the hits on the *Seydlitz*, and the retreat, the enemy's military success was rather overestimated than underestimated by us at the time because there were no trustworthy reports for judging the results of our own artillery fire. Another factor tending toward the overrating of the British performance was the circumstance that the German losses in man power were also appreciably greater than the British. While the English only had 14 dead and 30 wounded, the Germans lost 954 dead and 80 wounded.

It must also be distinctly remembered that the British shells only had a devastating effect when they penetrated as a result of the deck's large angle of incidence, while the German side armor, apparently even on the *Blucher*, offered successful resistance to all shells even at a great distance. The much lighter German shells penetrated in at least two cases (*Lion*) the British side armor plate—once at 11.18 and again between 11.35 and 11.50—at distances of from 160 or 145 to 150 hectometers. In the first instance such damage was caused in one of the machinery rooms that the machinery stopped. This tremendous effect of the German heavy armor-piercing shells was all the more astounding as the muzzle-energy of the British guns was almost doubly as great. If in spite of this the results of a comparison of the effect at the target are in favor of the Germans, the reason for this lies in the unquestionably better quality of the German armor-piercing shells and the British deficiency in armor protection. If, without considering the very much greater surface extent of the armor on the German ships, one only compares the strength at the water line, it is seen that the *Lion* and *Tiger* only had 229 millimeter armor strength as compared with the 300 millimeter of the *Derfflinger* and *Seydlitz;* the *Princess Royal* over 229 millimeters as compared with the 270 of the *Moltke*, and even the *New Zealand* and *Indomitable* only had 178 millimeters as against the 180 of the *Blucher*.

In view of the results of the battle, the English principle of a greater caliber and higher speed, leaving the builder all too little weight for armor protection and floating safety, may be viewed as erroneous. This, however, was only fully recognized in the Battle of Skaggerak. The satisfaction in England over their own type of battle cruiser, after the battles of the Falkland Islands and the Dogger Bank, was no doubt very great. This inclination to self-overestimation was all the greater when they succeeded in destroying the *Blucher*. One overlooked the fact all too easily that this was no battle cruiser. Its destruction was not due to its belonging to an old class, but to the destructive effect of the shell which struck its deck, and due to the large angle of incidence on account of the unusually great distance. This would have proved equally as destructive to any battle cruiser, since a sufficient protection against such hits was not possible even in the new English and German types in spite of their gigantic displacements, on account of the extensive deck surface. Also, the position of the *Blucher* as the rear ship of the line and its somewhat slower speed were scarcely factors in its destruction. On the other hand, there is no doubt that the greater fighting power of the guns of, say, the *Von der Tann*, would have made a far different outcome to the battle, while the brilliant training of the gunners on the *Blucher* (used in peace time as artillery training ship) scarcely made itself felt on account of the lesser radius and effect of its 21-centimeter caliber.

It is and remains a fact that through the failure of the German project and the total loss of the *Blucher*, the strategical victory of the day goes to the English in spite of the better artillery performance of the Germans. The new system of defending the British coast seems to have been successful. After two unpunished attacks by the German battle cruisers against the British coast, they succeeded for the first time in confronting the Germans with a superior force and in bringing them serious losses. It was erroneously believed in England that two German battle cruisers had been disabled, and they attached much greater significance to this suppositional result of the battle than to the destruction of the *Blucher*, considerably inferior to the battle cruisers in military value. Until these cruisers could be repaired a new attack on the English east coast seemed very unlikely, and also the danger of an invasion, which had already been taken quite seriously, decreased considerably. There also was not so much worry regarding the safeguarding of the British position in Flanders, and it no longer seemed necessary to hold so many troops back in England. The first strategical result of the battle showed itself four days later in the definite decision to carry out the long-contemplated attack against the Dardanelles.

The political evaluation of the military success was especially clever. In a brilliant speech in Parliament, Mr. Churchill, as First Lord of the Admiralty, stated that the British guns and projectiles had shown themselves far superior to the German, that up to that time they had underestimated their own markmanship, that the English machinery had performed wonders, and that the British type of battle cruiser, which had already had a triumph at the Falkland Islands, had now again brilliantly demonstrated its worth. After this trial by fire, it would scarcely any longer be doubtful as to what would be the outcome of a bigger battle. If these remarks were intended in the first place to revive the fighting spirit of the British nation, after the numerous disappointments, they certainly found a remarkable response in certain Dutch, Danish, Norwegian, and above all, American newspapers. The expressions of disappointment at the premature interruption of the battle and the serious damage to the *Lion*, such as were voiced in individual English papers, were withdrawn, no less than the doubts as to the reliability of the British Admiralty reports such as were generated by the withholding of the report of the loss of the *Audacious*. Dutch papers which received the official German reports of the Wolff Telegraphic Agency and which contradicted the Reuter reports, were not allowed by the censor to enter England and were sent back to Holland.

In the British camp, great hope was laid on the very eagerly believed moral effect on the German crews of the result of the battle. The Times expressed itself as follows in the already mentioned report:

> It is quite true that, as a rule, the German crews fought with great bravery, and our Admiralty has admitted that Sunday's battle was stuck out well by both sides. At the same time, it must not be overlooked that a retreat of any kind has a very depressing affect on officers and men, especially when it is accompanied by heavy losses. One must also remember that the German crews have been shut up on their ships for many months, and even though this kind of politics was clever in many ways, it must have had a discouraging effect on the people.

The Corriere della Sera saw the results of the battles in an entirely different light and one more nearly approaching the truth. In a review of the battle of January 26, 1915, it expressed the following opinion:

> Morale, discipline, bravery, and skill, which all play such an important part in a victory, are equal in the two races at war—the Teutonic and Anglo-Saxon. The German Navy, although a product of our own period and an absolutely continental country, has shown that it has attained a degree of training in its personnel which is equal to that of the English Navy with a hundred years of experience behind it and is a product of the insular character of the country.

WITHDRAWAL OF ENGLISH OFFICIALS FROM CHILE.

22 May, 1922.

1. Within the past two months there has been a most marked change in regard to England's policy in Chile. For over 40 years England has exploited this country, it yielding millions and millions of pounds to her financiers and business men, and English influence has been the paramount foreign influence politically, financially, and socially in the country.

2. Before speculating on the causes of this sudden change it is well to first state what has recently happened, to show how England is withdrawing.

3. The most notable event which proves this conclusion is the abandonment of the British Legation at Santiago. During the past two weeks the British minister, all secretaries except one, and all clerks and employees have left for England, with no intention of returning or of reliefs being sent. The legation building has been closed and contents sold by private sale or auction. The one secretary that has been left as chargé d'affaires is young and inexperienced in the diplomatic service, and he has moved the legation headquarters to a small apartment. Furthermore, he has stated that his orders, on account of no office force being allowed him, are to abandon all the regular former routine reports and not to communicate with the foreign office unless some special event happens. In his own words, he is left simply as a caretaker and custodian of records—much to his disgust, as he, too, wishes to return home.

4. In addition to the above, the following facts also tend to support the contention that England has withdrawn generally from South America, and the west coast particularly:

(*a*) A few months ago the two naval attachés accredited to South America, the two leaders in the anti-American propaganda, were recalled and returned to England.

(*b*) The two English Army colonials acting as instructors to the Chilean Army have told me personally they expect to return without reliefs in two months. Incidentally, they seem to have, from private conversations, a very poor opinion of the Chilean Army.

(*c*) During the past three months there has been a noticeable withdrawal from Chile and return to England of men who have long been prominent in the financial and business world of Chile. In most cases they have sold or leased their houses and auctioned off their effects. Presumably, they have left the country for good.

(*d*) A British naval officer who had been lent to the Chilean navy for three years as gunnery instructor was informed that if he wished to continue he would have to go on the retired list. As he is mar-

ried to a Chilean lady and has a home near Valparaiso he decided to retire and remain.

(*e*) Over 20 English merchant marine captains and other officers, some of whom have been on this coast for over 30 years, on account of the new law of cabotage having cost their positions, have also returned.

5. Sufficient evidence has been found to prove that the so-called anti-American conspiracy in South America actually did exist, and that the British interests were behind it. Unquestionably, during 1919, 1920, and 1921, the British Intelligence Service was making a drive in this country. During 1921 a rear admiral, chief of the British Naval Intelligence during the war, and consistently anti-American, spent several months in South America, and two months in Chile. In fact, at the present time, the only cloud on the horizon is a statement made by his agent in the British Legation before he left, to the effect that the admiral might possibly make another trip to South America in the coming year. For it was this admiral who, resigning just at the armistice, organized, from the former British Naval Intelligence Service, a sort of an economic intelligence service which planned to capture trade for England all over the world.

6. There are only two possible explanations in regard to this sudden change of England's policy in Chile.

(*a*) An understanding with our State Department, in regard to spheres of influence, made at the Disarmament Conference at Washington, (*b*) or general business depression in Chile, particularly in the nitrate industry and the loss to England of the shipping and carrying trade, by the passage of the new coastwise traffic law.

7. With respect to (*b*), it should be understood that for years England's chief revenues from this country came from trade in nitrate and shipping. She had the monopoly in both. At the present time the nitrate industry is at a low ebb. Whether it will ever return or not to its former position is a mooted question. The processes of making nitrate artificially from the air have advanced to such a state that some believe that Chilean nitrate will never again yield the handsome profits it has in the past. In any event, in recent years, American corporations have so cut into the nitrate fields and have established themselves so firmly there that England will never again have a monopoly of the industry.

8. One has only to glance at the harbor of Valparaiso and note the number of English merchant ships tied up to buoys and out of commission to realize what the 'Law of cabotage," promulgated last February, has done to English shipping on the west coast of South America. The coastwise trade which has rendered such large returns to England for 50 years is dead for all time.

9. England's trade in manufactured commodities with Chile has never had a monopoly like the shipping and nitrate business. It never had the importance to her of these two industries. But, at any rate, that too is finished on account of the exchange. English merchants can not hope to compete with the German and French, especially the Germans in this respect.

10. In conclusion, whatever the reason may be, international agreement, loss of industries, or internal troubles within the Empire, and perhaps all three of these reasons carried weight in coming to a decision—the fact remains that England, officially and privately, has withdrawn from Chile to such an extent that it can be considered an absolute change of foreign policy with respect to this country.

LORD NORTHCLIFFE.

17 May, 1922.

The Associated Newspapers (Ltd.), comprising the Daily Mail, Evening News, and Weekly Despatch, has resigned its membership in the Newspaper Proprietors' Association, stating as one of its reasons that Lord Northcliffe strongly objects to certain proposed reductions in wages, and feels that full liberty to deal with these matters should be left to individuals.

It has been stated by well-informed newspaper men that this action of Lord Northcliffe will cost each of the London daily newspapers approximately £50,000.

Lord Northcliffe was instrumental in forming this association and has been vice president of it. His action in withdrawing from it is greeted with consternation among newspaper men and with anxiety by politicians and Government leaders.

It is suggested that there is another motive for Lord Northcliffe's action, namely, that he desires a freer hand in conducting his attacks upon the Government. The code of agreement under which the Newspaper Proprietors' Association operates limits him to some extent in this connection at present. His attacks upon the Government's policy with reference to the Genoa Conference are the source of much criticism.

There is no man in the British Empire who exercises as much influence on the public of the British Empire as does Lord Northcliffe, through the numerous papers which he controls, with the possible exception of the present Premier, Lloyd-George.

BRITISH POLICY REGARDING LEASING DOCKYARDS.

25 May, 1922.

The following article from the Naval and Military Record of May 10, 1922, is quoted as of special interest with reference to similar problems which may arise concerning United States navy yards:

A letter from the Admiralty to a correspondent is published at Portsmouth, giving the reasons why the Admiralty is unable to approve the suggestion to lease naval dockyards to private shipbuilders. The letter states:

"We have come unanimously to the conclusion that in no dockyard has any such scheme the likelihood of commercial success. The layout and organization of yards do not lend themselves to water-tight subdivisions. There is one source of power of all kinds in each yard and one set of shop supplies. Both new construction and dual control of these essentials would be an unworkable proposition, and a commercial firm would require a priority of user which the Navy could not always afford. This would entail considerable alteration and even additions to shops and a general increase of power service.

"For example, it is found that to carry out proposals to lease part of Chatham to a private firm would entail an immediate expenditure of £13,000. There would also be a fruitful source of discontent between the two bodies of men in the disparity of wages and conditions of employment."

Portsmouth has received another big ship refitting order, the Canadian Pacific Co. having decided to send the *Empress of India* to Messrs. Cramptons (Ltd.) for extensive work, which, it is expected, will employ a large number of men for about six weeks.

APPOINTMENTS OF DUTY CAPTAINS ABOLISHED.

9 May, 1922.

Among other berths at the Admiralty instituted during the war and now disestablished are those of the duty captains attached to the war staff. It was the function of these officers to sleep at the Admiralty in turn, always ready to receive messages, answer questions, do anything, or accept any responsibility that might come along. It was not until last year that the names of the duty captains appeared under a separate heading in the Navy List, they having previously been merged with those of other officers among the naval and marine staff in the operations division of the naval staff. Their duties now devolve upon the commanders in the operations division.

ROSYTH DOCKYARD.

12 May, 1922.

The Rosyth yard now employs about 5,000 men but expects, in the near future, to reduce this number to about 2,000. There are sufficient housing accommodations for 2,000 to 2,500 men just outside of the yard, which were erected during the war.

Only general work was going on in this yard, and many large ships were tied up in the basin and anchored in the stream. Ap-

Apparently the principal work at this yard at present is extensive alterations to the *Furious*. This vessel was in dock, but being a secret ship could not be visited. The *Furious* is one of the bulge ships, and the flying-off platform forward is still intact, but aft the ship has been completely stripped above the main deck, and extensive alterations were being made. It was stated by one of the dockyard officials that this vessel would go to Devonport for its completion, which would probably take in the neighborhood of four to six months.

In the basin are three large docks, only one of which is used to dock the *Hood*, and a 12-foot cut has been made in the head of this dock in order to take her. It was stated that she could be docked in other docks, but that it was too close a fit to undertake to dock her in one of them unless in case of extreme emergency. The *Hood* could also be docked in the entrance lock to the basin, but if this were done the entire entrance to the basin would be blocked.

The Admiralty has issued instructions to the dockyard not to fend any ships on the bulge while entering the docks or to shore them on the bulge when in dock. Consequently, the entrances to all docks are fitted with projecting fenders which fend the ship off above the bulge.

The only other repairs of any magnitude were being made to one destroyer and a destroyer leader, *Bruce*. These were in the nature of general overhaul and refitting.

Rosyth Dockyard has no building facilities, and the proposed enlargement of this yard, which was drawn up during the war, has not been completed, and no further work is being done on extension of the plant at present. The plant, however, is built for the largest kind of repair work, but has no building ways or facilities for building ships. The basin has two fixed cranes capable of lifting 150 tons and several traveling cranes of smaller lifting capacity. The yard is well laid out so that all shops are connected to the fitting-out basin and docks by numerous railroad tracks to facilitate the handling of material.

BRITISH ARMY DISTRIBUTION.

10 May, 1922.

The following table gives the permanent forces and trained reserves of the Dominions:

	Permanent forces.	Trained reserves.
Canada	4,000	25,000
South Africa	2,200	12,000
Australia	2,600	108,000
New Zealand	980	23,000

NOTE.—Figures for Canada subject to revision.

The Indian army totals 218,000 all ranks. In this total are included the British forces in India, 70,000 all ranks, plus approximately 40,000 reservists and 30,000 auxiliary force.

In addition to India and Egypt, garrisons are regularly maintained as follows (figures approximate):

Gibraltar	2,698	North China:	
Bermuda	489	British	52
Jamaica	528	Indian	745
Malta	2,566	South China:	
Cyprus	115	British	1,182
Khartoum (February, 1922)	841	Indian	770
Ceylon	293	Singapore	1,024
Mauritius	138	West Africa (Gold Coast)	327

In addition to the garrisons mentioned above, forces are being maintained in Upper Silesia, on the Rhine, in Constantinople (British and Indian), in Mesopotamia (British and Indian), and in Egypt and Palestine (British, Indian, and Egyptian).

The above figures are approximately correct for March 1, 1922.

H–42 DISASTER.

9 May, 1922.

Official details of the disaster to submarine *H–42* were announced in the House of Commons by the financial secretary to the Admiralty, who stated that at the time of the disaster *H–42* and other submarines of the Third Flotilla were delivering a dummy attack on destroyers.

The destroyers were proceeding at a speed of 20 knots, when at 9.41 a. m. submarine *H–42* rose to the surface some 30 yards right ahead of the *Versatile*. The destroyer's helm was put hard a port and the engine to full speed ahead, but the ship had not started to turn when she struck *H–42* just above the conning tower.

The immediate cause of the accident was that, contrary to instructions, *H–42* rose to the surface when she did. The reason for her surfacing was not known.

It will be recalled that the disaster to the *H–42* is the third disaster with submarines engaged in tactical maneuvers with the main fleet of the Royal Navy during the past two years.

Each of these three accidents has been a collision between submarines and destroyers. It is recalled that this is the second such accident this winter during the maneuvers in the Mediterranean, the last one having taken place during February, off Majorca. It is known that the British have introduced smoke screens made from dropping smoke bombs from aircraft in the fleet maneuvers, and it was thought possible this may have been partly responsible for the

accident. It is noted, however, that there is no mention in the official statement of the disaster concerning smoke screens, and that evidently none was used in the maneuvers during which this particular collision occurred.

BRITISH TANKS.

12 May, 1922.

Every indication points to the fact that the British War Office contemplates in the near future a greater dependence on tanks. This is especially so in the use of the light tank, which will be amphibious in character and capable of high speed.

FRENCH MILITARY AND NAVAL AIR SERVICES.

24 May, 1922.

(The following article, appearing in the Figaro of 21 May, 1922, by Commandant Thomazi, is an indication of the type of propaganda being used in France toward the continuance of the present establishment of a separate naval and military air force, with the construction and design centered in the mechanical section under Secretary of State for Air. Commandant Thomazi is a retired captain of the navy.)

The article follows:

1. Naval aeronautics, which disposed of 37 million francs in the 1922 budget, ask for 65 million for the next year. The financial committees of the Chamber and Senate are going to examine the provisions with a critical eye, discussing them chapter by chapter, and will try to make all the reductions possible. They can not, however, reduce the amount much below that asked for, as it would not only stop the development of this branch, which is so important to our marine activity, but also would allow this recently born activity to disappear due to a lack of materials and training.

2. The program of the ministry of marine for 1923 consists of the maintenance of aviation services in their present state. It is not a question of creating new squadrons nor of constructing new dirigibles, but it is necessary that the number of our machines, already low, be not diminished and that they be given the means of training.

3. Naval aviation has lived since 1919 on the orders placed before the armistice, or rather on the orders that have not been canceled. For example, work was started in 1917 on a large, rigid dirigible (55,000 cubic meters), the construction of which was stopped and a large forfeit paid, a sum so large one asks if it would not have been cheaper to have finished it. We have not bought, so to speak, any

planes for the last three years, and up to now the supply of gas for the aviation centers has been from war stocks, but these stocks are not inexhaustible, and as far as the airplanes are concerned they are far from lasting forever. Notwithstanding the fact that the navy can make planes last four years, instead of the two and one-half years generally admitted in military aviation, the day will come when they must be replaced. These squadrons are already so poor that the commander hesitates to prescribe the exercises most necessary; and on such an occasion as the voyage of the President of the Republic to the Morrocan meeting their participation was reduced to one or two machines, which quickly returned to their fields so as not to risk an irreparable accident.

4. We must buy new machines to replace those that are used up and gasoline for flights as well as completing ground accommodations. These expenses are heavy on the budget. The hangars hastily built during the war are not strong; the storehouses and repair shops are not sufficient; the airplanes and dirigibles can no more do without them than a ship can do without a harbor or dry dock. As unimportant as we conceive our aerial establishment, it can not be accommodated indefinitely by the remnants from the war. The value of a military force, whatever it be, is the value of the personnel, and this is particularly true of aviation. Pilots, observers, and mechanics must be carefully chosen and need constant training. The war has made excellent aviators, but it is always necessary to train new ones, because a corps that does not recruit new strength dies quickly, especially because the naval aviation does not form a separate corps like the military aviation.

5. There are good reasons for this, first, one could not form a separate corps with such a little effective personnel (complete-ment); second, it is a great advantage to the Navy and naval aviation itself that the aviation commission entail, like the gunner and torpedoman, only a temporary detail to special duties. And this can only be acquired after a complete naval training, which does not prevent his return to general service. Among many examples, one can cite that of an officer who recently was forced down. Well, at sea, he certainly would have lost himself and his machine if he had not been a good sailor. The observers also should recognize the ships, determine their speed and course, and have a special education, which is not acquired in a few lessons and without which they risk committing the most improbable errors.

6. Also the Navy itself is opposed to consolidation of naval and military aviation, as has been done in Great Britain, where the inconvenience of such a system appears so plainly that several special articles ask for the return of naval aviation to the navy.

7. However, at home the only centralization that is really necessary has already been realized. The undersecretary is charged with the study, the construction orders, and trials of the machines for the navy as well as for the army. Orders may be placed in the most advantageous conditions and the trials made to benefit both services.

8. Naval aviation has far to go to be as useful as it could be, and also to create machines that are most fitted to the navy. Hydroairplanes have grave defects. They are made heavy by the floats; they can not go as high as ordinary planes; they carry less useful load and never land without risks. The English had, toward 1917, renounced the hydroairplanes to employ only land planes. They came back to hydroplanes because the land plane, if necessary, could land on water, but not flying off again limited its use. The satisfactory hydroplane (seaplane) has yet to be found. Will it be the heavy seaplane, weighing around 40 tons, that will live normally on water in port like a ship or a land plane able to float and and to leave the sea if rough? The question is of importance, and the answer will only be arrived at by trials asking for the construction of new machines.

9. Reliable solutions are yet to be found for landing on the deck of a ship. The trials made to date with the *Bearn* are far from complete for the transformation of the ship has hardly been started.

10. The problem of employing the air forces and dirigibles with the naval forces and coast defenses has hardly been touched. It is not a lack of thinking of it or that the personnel of naval aviation lacks the necessary capabilities, but because the credits have not been granted. It is a doctrine to be built up; every one sees the aim and awaits only the means of starting.

11. And these studies only will permit the starting of the aeronautical program asked for in the budget. The program is necessarily limited by time, because nobody can foresee what naval aviation will be in a few years. This program is necessary nevertheless, because we can not go on living day by day, and we must give a solid basis to the organization upon which our naval power may depend.

FRENCH COMMERCIAL AVIATION.

23 May, 1922.

1. France recognizes the value of air travel and its importance to the future. She has budgeted for civilian aviation for the year 1922 154,878,000 francs. The largest item in the estimate is 84,405,000 francs for works, aerodromes, technical laboratories, and meteorological services. A total of 37,022,000 francs has been set aside for subsidies to French companies, enabling them to share in continental

air transportation, for which in 1921 the sum of 27,885,000 francs was apportioned among the Bordeaux-Toulouse-Montpellier route: the Toulouse-Rabat (Morocco)-Casablanca mail route, the Bayonne-Santander Bilbao lines. All of these are now in operation and are to be maintained. In 1922 subsidies will be granted to six additional international lines.

2. Evidence of the popularity of the local air routes is shown by the statement of the company operating the Bordeaux-Toulouse-Montpellier route. According to his report, 3,700 passengers were carried and 600,000 kilometers were covered without accident during the last 26 months. Twenty Salmson 260-horsepower three-passenger planes were employed in the service.

3. A line from Bordeaux to Marseille was inaugurated in November, and the extension of this service to Ajaccio (Corsica) and Bizerta-Tunis (Tunisia) is planned to follow shortly. The rates on this new line are comparatively low, averaging only 50 per cent more than first-class railway fares, and thus offering considerable inducements for this kind of transportation.

4. The outline of the project for future international air service in southern Europe indicates Bordeaux as an aerial port for the head of lines to Switzerland, Morocco, Spain, Italy, and the Mediterranean ports, and as a stop on the Paris-Lisbon route.

5. Naturally, Paris is the great center of French commercial aviation, the Le Bourget aerodrome in the suburbs taking on the appearance of a busy railway terminal. Airplanes to and from London (five departures daily) and Brussels carry the largest number of passengers.

GERMAN NAVAL AERONAUTICS.

13 April, 1922.

Before the war, all branches of naval aeronautics were still in the kindergarten stage. After the successes of the Deutsche Luftfahrt Co. and the Zeppelins in the army, the navy undertook trials with the *L–1* but the venture was unfortunately prematurely broken off on account of the loss of the *L–1* during a heavy electrical storm in the North Sea. With characteristic far-sightedness even before the loss of the *L–1*, a new type of ship had been developed embodying a number of improvements; in spite of the rapid development during the war, this type was only generally adopted two years ago. Unfortunately, this ship (*L–2*) was also the victim of an accident. It was burned in the air and carried with it to a fiery death almost the entire personnel necessary for carrying on the work. The position of chief of the department of naval aeronautics, which had now been vacated for the second time, was placed in the hands of Lieut. Commander Peter Strasser, who was better qualified to fill the post

than anyone else. He worked himself into this entirely new field of work with indefatigable energy by training himself from the very first foundation principles. The rapid development and high state of perfection of this branch of the service is due entirely to his far-sightedness and never-tiring energy together with an extraordinarily happy choice of expert technical men in the Imperial Navy Department. When the war broke out, the bureau of aeronautics had only one airship in its possession, the *L–3*, which still lay in a shed rented by the Navy. The first actual flying field, Nordolz near Cuxhaven, was made ready as an emergency measure in the month of August, 1914. Since the *L–3* was wholly inadequate to fulfill the tasks allotted to the fleet, an old Parseval airship was called into service for reconnaissance work in the Baltic and was stationed in Kiel.

An agreement was made with the army whereby every second Zeppelin which was completed and several Schütte-Lanz ships were to be turned over to the navy. At the same time the preparation of other flying fields was undertaken, namely, at Tondern and Haage in East Frisia and at Seddin in Pomerania, nearly all of them being equipped with antiaircraft batteries. Gas plants adjoined all these fields, as the supply of gas from the private industries was no longer sufficient. A number of meteorological stations were opened and extended from the coast of Flanders as far as Königsberg, and later even into Russia. At periods of about every three hours, these stations communicated the necessary meteorological observations for reconnaissance work and actual offensive to their central station in Wilhelmshaven by means of wireless or telegraph. All these new arrangements called for a very large personnel, and it was not an easy task to find a sufficient number of suitable persons for this work. Men were not needed for the purely aeronautical work alone. The navy department instituted a special staff or command with a 1,000-kilogram bomb over to London when the weather was favorable; however, after three vain attempts to ascend, the undertaking was given up. The 22,500-cubic meter type in use at the beginning of the war soon proved inadequate for the ever increasing demands, especially when the question of offensive itself presented new problems. The size of the ship was therefore increased to 32,000 cubic meter Schütte-Lenz had already reached this figure in his first naval airship, the *SL–3*. However, the counter-aircraft weapons increased in efficiency as the offensives multiplied in the summer of 1915. After a transitional type of ship, as it were, in the beginning of the year 1916 a ship almost twice as large was built—the *L–30*, of 55,000 cubic meters. At the time, this seemed the very limit of possibilities, as larger ships were very difficult to manage on the

ground during bad weather. Therefore, this type of 55,000 cubic meters was improved and lightened up to the year 1918.

The firm of Schütte-Lanz was the only company capable of producing ships of this size and offensive requirements; but even so, their ships were not satisfactory in the North Sea on account of their wooden construction. They were therefore employed for lighter tasks in the Baltic. Of the pressure airships, the *PL–25*, an admirable reconnaissance ship, could no longer be used in attacks on account of its inadequate subdivisions. The Gross-Basenach delivered one ship, the *M–4*, but no more could be constructed on account of a lack of raw material. Two other Parseval ships were also recalled from service at the front.

The autumn of 1916 brought the first serious losses. The English employed artillery and airplanes against the Zeppelins which were becoming disagreeable factors for them. Unfortunately two of the most efficient and capable commanders, Lieutenants Mathy and Peterson, fell victims to these counterattacks. However, Commander Strasser continued his efforts to bring this aeronautical weapon to a point where it would be superior to the enemy's antiaircraft. In the summer of 1917, the ships succeeded in attaining altitudes during attacks, which were insupportable for the human organism without the artificial use of oxygen. In the very beginning, compressed oxygen was used and then later on, liquid air devices. On account of the enemy's seaplanes and the very high flights in 1918 from the airplane cruisers, the altitude during reconnaissance work had to be increased until finally it always exceeded 5,000 meters. When peace was made with Russia at the end of 1917, the use of airships was abandoned and the already obsolete ships were hung in their sheds and placed definitely out of service.

The African undertaking of the *L–59* occurred at the same time. Inspired by the uninterrupted flight of the *LZ–120* lasting for 105 hours, an attempt was to be made to carry ammunition and medicaments by airship to the sorely pressed forces in East Africa. A ship of the 55,000 cubic meter type was lengthened 30 meters in order to be able to accommodate the cargo. Unfortunately, the *L–57* burned while on its trial trip so that the undertaking was postponed about eight weeks until a new ship, the *L–59*, was ready. The trip therefore came too late; the admiralty had to recall the *L–59* by wireless as East Africa was already evacuated by the German troops. With a heavy heart the airmen turned their ship toward home, south of the Dachel Oasis, on the upper Nile, and after a flight of 96 hours, in which they covered about 7,000 kilometers under the most difficult conditions from an aeronautical technical point of view, they entered the harbor of Jambol, in Bulgaria. Having been built originally as an offensive ship, it dropped

bombs on Naples, and then during an attack on Malta, without being itself attacked by the enemy, it fell in flames in the roads of Otranto. The cause of its loss can not be determined. Besides the losses inflicted by the enemy, heavy disasters also occurred right at home. After several ships had been burned in their sheds, five of the newest ships were destroyed in an explosion at Ahlhorn in January, 1918. The climax was passed in the year 1918. Airplanes and an admirably organized artillery in England made an offensive so difficult that only during very rare nights with favorable clouds was there any hope of a success commensurate with the risk involved. Even during reconnaissance work in the North Sea the increasing use of land planes by the enemy kept the airships busy. In July, 1918, the English succeeded in destroying by their bombs two airships hanging in their sheds in the harbor of Tondern. But in spite of all these mishaps, under the inspiration of the chief of the department, Lieutenant Commander Strasser, there was an impulse in this branch of the service to rise to its former performances and successes. The *L–70* embodied a new type of ship which seemed to fulfill all the demands of the war. Equipped with seven motors and having a climbing performance of 7,000 meters, it was hoped that they would be superior to the airplanes; but on a clear moonlight night during an attacking expedition the ship fell a victim to enemy artillery, as on account of the unfavorable temperature conditions it was unable to attain a safe altitude. Lieutenant Commander Strasser fell with the ship, as in spite of the advice of his colleagues he never failed to take part personally in one offensive during each period. Almost simultaneously one of the oldest and most efficient commanders, Lieutenant Commander Prölss, was shot down by an airplane while he was engaged in a reconnaissance flight. On account of these losses the offensive was abandoned until the new 62,000 cubic meter type embodying several alterations had proven itself entirely satisfactory on the battle front. Then the revolution broke out and brought the war and the further development of the airship to an end.

The following were the important tasks allotted to the airship in naval warfare:

(1) General reconnaissance work during the day in the Baltic and North Seas, Skagerrak, and Kattegat, often up to the English coast, and during the clear summer months such service also at night.

(2) Reconnaissance service for attacks and special undertakings of the fleet.

(3) Protection of the advancing fleet and convoy for outgoing and incoming auxiliary cruisers.

(4) As protection for mine searchers during the day and sometimes even mine searching itself.

(5) Attacks on England and Russia wherein besides the actual results of the attendant explosions and fire, the moral effect on the enemy was not to be underestimated. Further than this, a large quantity of artillery, airplanes, and men were held back in England and in this way the western front was relieved to a very appreciable extent.

Any attempt to show in detail here the extent to which the airships fulfilled these tasks would take one too far; the appended table giving the performances and losses of this weapon which represented the most perfect expression and product of the German spirit of research and discovery, may suffice for this purpose. These figures, names, and succinct dates which are now published for the first time, will speak more than words to those persons who understand their significance.

At the outbreak of the revolution the Navy had 7 airships in service and 2 training ships in Nordholz. They were immediately placed out of service since any further service was out of the question and would have entailed too great an expense. In accordance with the terms of the armistice the ships were to be placed in their sheds and demobilized—that is, armament, wireless, and motors removed. The enemy control commission inspected same and attempted to appropriate as much constructive information as possible for their own purposes. In July, 1919, on the day when the fleet was sunk in Scapa Flow, 7 of these ships were destroyed in their sheds by an unknown agency. It seemed impossible to repair them, so they were scrapped.

In the peace treaty the enemy required the surrender of all airships. These, therefore, had to be reconstructed and delivered to the enemy harbors by a German crew. Indemnification was demanded for the destroyed ships. The navy undertook this task with a heavy heart. A crew was gotten together which undertook the reconstruction and trial flight, and the *L–71* and *L–64* were the first ships of this set and were produced in Ahlhorn. A civil crew now took them to Pulham in England. Both vessels were remade in England for nonmilitary purposes. They were to be flown to Egypt and possibly also to India, but there was no firm ready to undertake the project. *L–64* was even inflated. When an English airship, the *R–34*, made an emergency landing in Pulham, the *L–64* was taken out of the shed and the *R–34* put in for repairs. During the night there was a storm and the *L–64* tore loose from her moorings and stranded about 9 kilometers distant, where she was scrapped. *L–71* was still lying in a shed in England. The *L–72*, although not yet taken over by the navy, was demanded by France and in June, 1920, was taken from Friedrichshafen to Maubeuge. The workmen constructing the ship had secretly attached a long black mourning pennant to the stern of

the ship, which unrolled during the ascent. The French made several trips with the ship, which was then stationed in Toulon. After the destruction of the *L–52* and *L–56*, the *L–61*, which had to be surrendered to Italy, still lay in Wittmundhafen. During the trial flight, the *L–61* flew once more over the North Sea and Wilhelmshaven and then flew over the Alps to Ciampino near Rome. The Italians were not long to rejoice over their *Italia*, as the *L–61* was called. During one of the very first flights, the ship with all motors on, literally threw herself at the feet of the King, resulting in the death of several of the crew. The ship was beyond repair and had to be scrapped.

Meanwhile the work of taking to pieces the *SL–22* in Jüterborg was begun and the Allied Powers each took certain portions in order in this way to be able to study our patents. In the Baltic district the *L–37* and *LZ–113* were still in Seddin and the *L–30* and *LZ–120* in Seerappin. *L–30* and*L–37* were scrapped—the first for Belgium and the latter for Japan. Parts of both were delivered to each of these Powers. *LZ–113* was made ready for flight and taken to Maubeuge. On account of lack of gas, after the removal of two motors, the *LZ–120* was taken from Seerappin to Sedden, where it was completed. Solemnly hauling down the flag, the last naval airship was put out of service. On the same day the crew set up a monument in Stolp on the graves of their comrades of the naval aeronautical department who had met their death on the *SL–6*. With sorrowful hearts but with new hope in their breasts the last naval aeronautical crew delivered the last naval airship over to the enemy. On Christmas night, 1920, the *LZ–120* flew to Ciampino, near Rome. This also was short lived. After 14 successful flights it was placed out of service. When hanging the ship in the hangar the suspension ropes broke and the ship collapsed.

Among the enemy Powers, England, Italy, France, the United States, and Japan all had an air service during the war. The last-named power (Japan) had purchased a Parseval ship before the war, but there is no record of its military performances. The United States can also show no great military performances. In France, where the rigid ship *Spiess*, a copy of the Zeppelin did not prove satisfactory, there were several pressure airships (*Alsace* and *Adjutant Vinzennot*) in service at the beginning of the war which undertook several attacks over the German front. The *Alsace* was shot down behind the German lines. Italy had a well-developed service with pressure airships. Trieste and other harbor cities were visited by them at various times and bombs were thrown. After the Austrian flyers had several successful counterattacks to their credit, the offensive was stopped. Using the Zeppelins which had been shot down as a pattern, England also attempted to build large rigid ships, but it

was only in the year 1918 that they had any success. After the war the firms most active in shipbuilding were the Vickers Co. and Short Bros., the latter building wooden ships. The Vickers ship, the *R–34*, was the first airship to cross the ocean, and returned to England from New York in a flight of about 60 hours—a performance which was far behind that of the *L–59* on its African trip, inasmuch as the *R–34* had every possible assistance at its disposition. The first ship which expressed actual English ideas was the *R–38* (or the *R–2*, as it was to be called in the American Navy, for which it was destined). The destruction of the *R–38*, which on August 23, 1921, broke in two at Hull and burned, put an end to these ideas. England had learned a good deal during the war with small pressure airships. They were rapid in action and, as a general thing, were used against submarines.

On the whole, the fact remains that in the years before the war and during the war itself Germany far surpassed all other nations in the construction and use of airships. Even after the surrender of the German model ships to the enemy, Germany still stood at the head, as no one of the other nations had had such a ripe experience, and they were all lacking, more or less, in the necessary scientific foundation. Even though the treaty of Versailles may temporarily prohibit any activity in airship construction in Germany, it can not rob her of her experiences and there is still the hope that Count Zeppelin's work will some day go on its victorious way, not as a military weapon but as a long-looked-for cultural achievement of the human brain which, like all other intellectual progress, can not be held back by cannon and bayonet.

GERMAN SOARING FLIGHT.

28 April, 1922.

The airplane employed corresponded to those used in former years and weighed about 48 kilograms, measuring 11 meters span and 15.35 meters total area. Crew included, the lead per unit amounted to 8 kilograms.

On September 13 a wind of 10–12 meters per second was blowing from southwest, being remarkable for its extraordinary gustiness and sudden considerable changes of direction. Sometimes it calmed down, only to attain in the next moment a hurricanelike force of 20 meters. The flights took place from the western slope of Heidelstein. Toward south and west the incline is of 2° to 3°; adjacent ridges slope down by some 4° to 6° for 100 to 200 meters, to level out farther on for a few kilometers, or to assume a flatter decline of 2° to 3°.

At first a few soaring flights were performed of 6 minutes and of longer duration without loss of altitude. Meanwhile the wind had freshened, and we decided to climb higher and to make longer flights. We got off about 8.30 a. m. The pilot let the airplane rise itself by utilizing some strong gusts of the wind. In availing himself skilfully of some more blasts he made us bye and bye climb to a greater elevation. The machine lay soon in 50 to 60 meters altitude and was making southwestward, constantly climbing against the wind. Then the pilot steered the craft in a more westerly direction for a distance of 1,200 meters, up to the highroad from Bischofshein to Wuestensacheen; now the plane kept, with regular oscillations, an altitude of more than 100 meters. Presently the pilot traced a curve and went back to the starting place, rounding the latter in a wide circle, some 150 meters above it. After the flight was continued in a southeast direction as far as the pasture lands of Weisbach, 1½ kilometers distant. Again a curve was executed and again we returned to the start, which a second time was rounded in a circle of large radius, considerable part of it with the wind. During this the machine lay far back of the starting place, partially above the wooded slopes of the Heidelstein, which fall toward Wuestensacheen. After that the plane was slowly brought down, against the wind, and to the landing. It touched ground after 21 minutes 37 seconds. The landing place lay about 150 meters from the start, and only 12 meters lower. The flight was performed above a practically level track of land, nearly the whole time, which precluded the utilization of ascending air currents, and proves that the energy was gained solely from the oscillations of the wind. It is worthy of notice, that the speed of the machine against the wind was subject to variations of some intensity. Likewise it became evident, that its altitude augmented, every time a curve was begun. On the other hand no loss of height could be noted when it flew with the wind.

The airplane lay quietly in the air during the whole time and obeyed minutely to the rudder. The great success, achieved with greatest ease—and during which the craft remained permanently under perfect control of the pilot—is to be attributed entirely to the use of supple, elastic wings. It could be distinctly observed from the ground how the supporting surface were in constant motion and automatically, as it were, assumed a position most suitable with regard to the wind, the fuselage conserving its undisturbed situation.

The goal of continuous motorless flight appears to be reached. The experimenters had conducted their experiments with elastic wings for 10 years. The lately accomplished flights have proved that we are in possession of a soaring machine which will fly even in a most squally wind for a long time and without physical exertion of the pilot.

NIGHT AIR SERVICE.

Source: German Officer.

25 April, 1922.

With the extension of the air service over long distances, the necessity will more and more arise for the carrying out of the air service at night also. The advantages gained by day by means of the airplanes, if it must remain lying in the shed at night, as a rule, would be counteracted by the express trains.

This knowledge has already led to the taking up of a night service in the American air post service. Nevertheless, in other lands such an air service has not yet been organized, because they are generally too small and the service between cities to the extent necessary is only in development. Arrangements have already been made for a service in the darkness or in the fog on the route between Paris-London with success.

In the near future definite flight service during the entire night will not come into question for Germany; however, in spite of this, it appears desirable even now to work on the organization of such a service, which may become necessary at any time for an international service. Nevertheless, in the near future it will also be necessary for Germany to begin the air services in the earliest hours of the morning—that is, still during darkness. For individual distances an organization on the ground will come into question, which will correspond or approach that of an individual night-flight service.

The International Convention for Air Navigation contains in its supplement certain instructions for night service at and near the neighborhood of the aerodromes. These regulations go so far that they can not be carried out by the countries belonging to the convention.

In Germany these instructions do not come into consideration. According to article 319 of the peace terms, Germany has solely agreed, by suitable measures, to definitely ascertain that each German airplane flying over Germany observes the instructions regarding lights and signals, the flight regulations and air-service orders for aerodrome and their vicinity, as laid down in the International Convention for Air Navigation. This, according to the wording, refers solely to the self-given instructions for aircraft, not to all regulations of the international convention.

Entirely apart from this, Germany has also an interest in a possible uniform regulation for the illuminating of aerodrome and routes in the interest of joining an international air service and thereby to find the most simple and least expensive means of carrying out a night service.

In this the error must not be made that in considering the saving of expense, insufficient means for illuminating of aerodrome and flight routes are used. A successful night service will be almost entirely dependent on this. The following is an idea for the illumination of the flight routes. In it there is a distinction between the aerodrome illumination and the so-called land lights and orienting lights. The first will show the pilot and landing places and lights, the latter will show him the right flight course.

AERODROME ILLUMINATION.

For the illumination of an aerodrome the following proved very practical and useful:

It showed the necessity of a line being indicated and lighted for the pilot, indicating where he must land, that is, where the airplane after floating can touch the ground; further that the pilot has one, better two, points, which give him the rolling direction after landing.

The different constructions of illuminating systems of the various firms have the disadvantage that the lights are too close together and the illuminated landing course has too small an expansion. The result of this is that the airplane—that is, the modern commercial machines with long run—rolls past the lights and runs the risk of going out of the course. The possibility of breaking out of the course to the side and of damaging the airplane as a consequence of a too sudden curve on the ground is therefore especially great, because after passing the lights the pilot can not see any longer, and, according to experience, tends to make an unpremedited curve. A further disadvantage of lights arranged too close together is the difficulty of recognizing the landing direction from above. Under certain conditions the pilot would therefore be influenced to circle in low altitude, which, because of the dangerous moments connected with it, must be avoided as far as possible. The landing direction must be recognizable from a high altitude and at a great distance, so that the pilot as early as possible can go into a glide flight and land. Lights with short distances between them can be better seen from a distance than one single light.

Type of light source: Strong electric lamps are best and most practical as long as the current supply does not offer difficulties. As a substitute magnesium flares can be used; these also give a sharp and well-recognizable light. It has proved necessary to blend the lights on the side from which the airplane approaches, so that when landing the pilot is not blinded. It is well when the lights stand on poles about 1 meter high, which collapse themselves, if an airplane in a blunder rolls against them.

The plan of landing illumination must take the wind into consideration. Consequently on all four sides of the landing place connecting boxes must be installed, in order to be able to so connect the lamps as the wind direction requires. Too great complication of the illuminating system—whether with automatic switch device for the landing lights—increase the sources of error and therewith the possibility of failure. The more simple the plan the more sure the operation, and operation must be demanded under all conditions. A failure of the lights can have the worst results; thus besides electric lamps magnesium flares must be ready as reserve which must also be fastened to poles and blended on the approach side of the airplane. The illumination of the landing course can still be improved by means of one or more searchlights which should hold their lights to the side and back (see sketch). The searchlight must be diffused—that is, it must be spread by means of a special disk—because a single light cone is too small and too glaring. It must also be blended upward by a protector. The landing place must be illuminated where the pilot must start and land; that is, in the space between an ddirectly before and to the rear of the white lights. If the airplane has first properly landed then the pilot does not need further course lightning, but only one light to be able to hold the straight direction.

REISELER SPORT AIRPLANE.

2 May, 1922.

The sport and touring airplane developed by the Reiseler Bros., Johannisthal, in its entirety shows a parasol monoplane, with half free carrying front spanned wing. The body, a steel-tube boat with wire frame and material covering, has four-cornered cross section and ends in the rear in a vertical section. The under carriage shows the usual construction, with two pairs of V-formed struts, an auxiliary axle and a wheel axle hung in a rudder tension spring.

The two-cylinder air-cooled Haacke motor, 30 horsepower, with horizontal opposite lying cylinders, allows unhindered vision toward the front and in the event of the airplane turning over on its head, the cylinders are not so easily damaged. The motor is inclosed up to the outstanding cylinder head, and after loosening a few screws allows itself to be taken out toward the front. The benzine containers carry fuel for a three-hour flight; through its arrangements at the rear of the motor in the upper part of the body, a benzine pump is not needed, as the benzine goes to the carburetor by its own force (gravity feed). The motor works on a two-blade propeller of 2.20 meters diameter and 1.05 meters pitch. Propellers with larger diameters and less pitch make possible a shorter start.

The gear control shows the usual construction form.

The profile of the wings, constructed of wood, is as the *Albatross B–II* airplane. The rear edge of the wing is flexible. Canopies serve for connection of the wings with the upper and under beams of the body. Both front canopies are constructed as pyramids, using three struts. Both rear canopy parts each consists of two struts. Besides this for stiffening of the wings there is on each side a pair of struts, which run from the under beam of the body to the wing beam about half the span width. All wing struts consist of steel tubing with stream-line cross section. * * * The lateral control surfaces arranged on the wing ends are not balanced. They, as well as the remaining control mechanism, are operated by cable. These, as far as possible, are placed in the inside of the wings or inside the body. The span width is 7 meters, the length 5.80, and the surface area 11 square meters.

Value is laid on the great simplicity of the operating mechanism. During the flight the pilot has only the operation of the control lever and the gas lever. Besides these the only instrument on board is a revolution counter. The benzine cock, as well as the switch for the ignition, in normal cases, are not needed during the flight. When starting the motor no setting of the ignition is necessary. As well with throwing on the motor, as during the entire flight the ignition remains fixed.

The aeroplane weighs 150 kilograms empty, with fuel (20 kilograms) and pilots weight (60 kilograms) the weight in flight readiness is 230 kilograms; from this is obtained a surface load of 22 kilograms for each square meter. This surface loading is extremely low and assures the short start and low landing speed of the aeroplane. The performance load for each horsepower is 7.7 kilograms.

The flight performance in spite of the small motor is very favorable. With a weak wind a start stretch of 20 meters is calculated. Without contrary wind 35 to 40 meters start is sufficient. The run out itself without contrary wind is not more than 25 kilometers. The landing speed is about 45 kilometers per hour. From this, with normal tank contents, an action radius of 300 to 350 kilometers; 1,000 meters altitude is reached in 10 minutes. The maneuverability is noticeable. With the installation of a larger container the flight duration could be extended 10 hours and the action radius is 1,000 kilometers.

The Rieseler Sport Aeroplane is offered for the low purchase price of 35,000 marks. For the foreigner the machine costs no more than a good motor cycle, namely $500 or 3,000 francs, etc. The given illustration shows the Rieseler Sport Aeroplane next to a normal biplane. The elegant construction and the advantage of the horizontal motor makes this comparison noticeable.

GERMAN SUBMARINES IN THE MINE FIELDS.

9 May, 1922.

It is learned from conversations with former German submarine officers that the Allies' mine fields were avoided to a great extent by running on the surface through these mine fields at night. This was considered by far the safer course. In regard to the mine fields laid between Scotland and Norway, these officers stated only two boats were lost in the attempt at passage, and that it was easily possible with the exercise of a little care, to pass these mine fields.

In regard to the mine fields in the German Bight laid by the English submarines and mine layers, the German submarines steamed close to the Danish coast in very shallow water where it was practically impossible for the English to lay successful mine fields.

The mine fields in the English Channel were generally passed in the night on the surface, although an alert patrol could have forced the German submarines under and in some cases into the mine fields. German officers stated that their success in passing through the English Channel and through these mine fields was largely due to the fact that the patrol consisting of fishing vessels, destroyers and subchasers, were manned by French and that in numerous instances it was possible for their boats to pass close to the patrol unobserved during the night.

The positions of the nets in the English Channel were fairly well known to the Germans and therefore could be avoided. As regards underwater devices, the German officers stated that the later type of English net with mine attached, presented the greatest difficulties to the German subs.

Depth charges were always feared but were not necessarily destructive to the boat, particularly in deep water where the submarine could dive to depths of 50 meters or more to insure the explosion of a bomb being well above them.

DOCTOR FLAMM'S 7,000-TON SUBMARINE.

3 May, 1922.

At Doctor Flamm's invitation, drawings which he has just completed of a 7,000-ton submarine were inspected. Doctor Flamm claims that he has been invited by the British Admiralty to go to London and there exhibit his drawings with a view to selling the design. He also claims that Japanese representatives in Germany have shown an active interest in the design.

The drawings consisted of lines, typical cross section, and general arrangement plans of the boat, together with an outline sketch of the proposed engines. Except for certain modifications which will

be at once apparent from the sketches, the design is virtually an enlargement of the Flamm submarine design, already familiar to the Bureau of Construction and Repair.

He claims that by his "patent construction," which is familiar to the Bureau of Construction and Repair, he gets a high center of buoyancy, so that even with the high ordnance weights there is a metrocentric height when submerged of 20 centimeters (8 inches). Stability on the surface and for critical conditions while submerged have not yet been calculated.

He proposes to make the upper part of the strength hull of nickel-steel plating alone. He claims this nickel-steel plating has not been included in his calculations for longitudinal strength, but only in calculations for strength against local water pressures. Strength has been provided for a submerged depth of 100 meters.

He stated the frame spacing was 80 centimeter and that frames for inner and outer hulls were staggered so as to reduce to 40 centimeters the unsupported length of inner hull plating. This feature, however, was not shown on the drawings. On these was shown a frame spacing of 80 centimeters for the outer hull and approximately 60 centimeters for the inner hull.

He stated he had devised a scheme, not shown on his drawings, for loading, training, and firing the deck torpedo tubes while the boat was submerged.

Forty torpedoes are carried. Five hundred rounds of ammunition are provided for each turret 8-inch gun, and 1,00 rounds for each antiaircraft gun. The weight of the turrets was given as 90 tons each. He claimed the turret data had been furnished him by the Germania Werft, Kiel.

The motive power consists of five 5,000-horsepower M. A. N. Diesel engines and for submerged cruising an electric motor of 5,000 horsepower. These engines drive three propellers, each wing propeller being driven by two engines. The center propeller is driven while on the surface by the remaining Diesel engine and when submerged by the electric motor. A coupling arrangement is provided whereby this latter shaft may be driven by the Diesel engines and the electric motor at the same time, thus giving in an emergency a total of 30,000 horsepower.

The installation of the wing engines is novel. In order to take advantage of the special construction of the hull, to save space, and at the same time to keep the center of gravity low, these engines are installed at an angle of 45° to the vertical. Professor Flamm stated that this installation has been proved in practice, that some of the large submarines turned out in the late stages of the war had their wing engines installed in this manner, and were satisfactory in operation.

The dimensions of each engine as taken from the drawings were as follows:

Over-all length	meters	17.2
Over-all height	do	4.3
Over-all width	do	1.75
Stroke	millimeters	680
Bore	do	680

The number of revolutions was given as 340 per minute, which is considered rather low. At this speed, the piston velocity is given as *7 meters per second*, which appears rather high.

The gross weight of each engine without oil or water is estimated at 150,000 pounds, or a total of 750,000 pounds.

The ship's batteries as proposed by the Siemens-Schuckert Co. would have an estimated weight of 500 tons. These batteries are installed forward under the crew space from frame 117 forward, back to frame 87, and from frame 39 to frame 36.

The normal fuel space is 475 cubic meters, giving a normal fuel capacity of 410 tons, but by filling reserve water tanks, this capacity may be increased to a maximum of 1,200 tons. By cruising under the midship engine alone, at an estimated speed of 12 knots and with a maximum fuel load, a cruising radius of 22,000 miles is calculated.

No model experiments have been held with this type of hull construction, but with the engines at full speed, Professor Flamm estimates that a maximum surface speed of 22.5 knots is possible.

The general impression obtained from an inspection of the drawings was that the design is clever, but is made by a theorist rather than by a practical shipbuilder. Some of the claims to merit, advanced by Doctor Flamm in conversation, were not borne out by the drawings, and it is believed many modifications would be required before the boat could be built practically. Several difficult, if not impossible, constructions were indicated on the drawings.

The design is not completely worked out. When interrogated in regard to the practicability of several features he replied that the details had not been worked out. For example, he stated he would use dished bulkheads but they were not so indicated on the drawings. His calculations made to date were not shown but a glimpse of them showed they followed exactly the form used by him for his smaller design.

A recapitulation of the general data follows:

Submerged displacement (strength hull), 7,000.
Submerged displacement (outer line of hull), 9,000.
Length over all, 139 meters.
Breadth over all. 14.60 meters.
Height over all, 9.90 meters.
Mean draft (N. W. L.), 7+meters.

Horsepower (surface), 25,000 (5 Diesel engines).
Horsepower (submerged), 5,000 (1 electric motor).
Number of screws (2 engines on each outboard screw), 3.
Maximum surface speed (estimated), 22.5 knots.
Maximum surface radius (12 knots), 22,000 miles.
Metracentric height submerged, 20 centimeters.
Armament:
2 21-centimeter guns in two turrets.
4 8.8-centimeter antiaircraft guns on deck.
2 single torpedo tubes on deck.
4 torpedo tubes forward.
4 torpedo tubes aft.
40 torpedoes are carried.
1,000 rounds 21-centimeter ammunition.
4,000 rounds 8.8-centimeter ammunition.
Weight engines without oil or water and without auxiliaries 750,000.
Weight batteries, 500 tons.
Weight turrets, 90 tons each.
Weight fuel (normal), 410 tons.
Weight fuel (maximum), 1,200 tons.

The directors of the Germania Werft state that while they have acquired an option on Doctor Flamm's patent construction they have done so simply because it is their general policy to acquire rights whenever there is even a slight chance of the scheme having value. In this case they believe that Doctor Flamm's scheme, while promising on paper, has too many practical difficulties to make it worth while. One point mentioned in particular is that the heavy triangular stiffeners which are required will interfere seriously with interior arrangements. They look upon Doctor Flamm as a theoretical man who has but slight knowledge of the practical side of submarine construction. This latter opinion is concurred in by all the officers in the German Admiralty who have been interviewed.

The negotiations that were at one time under way between Vickers and Doctor Flamm for the purchase of rights to his construction have been discontinued on account of disagreement over financial arrangements.

GERMAN SPUN-GLASS INSULATION.

5 May, 1922.

A German firm makes the following statement regarding spun-glass insulation:

We have had very good success with the use of spun glass for thermal insultation. This material is used in copious quantities in the boilers and pipings in place of the previously used insulation material, and has proven very satisfactory when it is used in sufficient quantities.

Originally the material was not very durable, but in the latter years it has greatly improved so that it resists very satisfactorly any blows or shocks, and

it is therefore used very extensively for the insulation of steam cylinders in locomotives. The cost of same is approximately that of asbestos insulation but it is very much more expensive than fossil dust. It makes a better insulation than either of these materials.

FORMER GERMAN CRUISER REMODELED.

1 May, 1922.

On September 24, 1921, the motor ship *Odin* of the Hamburg Shipping Co., Arnold Bernstein, cleared Hamburg for her first voyage to St. Petersburg carrying 9 locomotives and 9 tenders for the Russian Government, besides agricultural implements. These were the first railway engines out of a lot of 720 reported ordered by the Russian Government from German manufacturers, principally from the large locomotive works of Henschel & Sohn, G. m/b/H at Cassel. The shipment of the first shipload of German railway engines to Russia since the war of course gave occasion to German manufacturers, exporters and shippers to rejoice over the fact that Germany had landed a big order for Russia's reconstruction. Local newspapers and trade magazines devoted space to describing in full the trip of the ship and its arrangements for this service.

While the shipping of the engines to Russia was the first venture of the German locomotive industry into foreign fields since the war, the motor ship *Odin* on which they were shipped was in itself a venture, having been a coastwise cruiser of the German Navy and rebuilt from what looked like a wreck into a freighter especially adapted for carrying locomotives.

The first trip of the *Odin* proved a success, according to the sources mentioned above. The ship proved seaworthy in every respect notwithstanding its very high and heavy deck load and the stormy weather encountered. It arrived at St. Petersburg on October 2, 1921, discharged its cargo of locomotives within 3½ days by means of a 70-ton swimming crane and was able to pull out on October 8. It is alleged that discharging was facilitated immensely by the position of the locomotives on board. It is further reported that there were no difficulties encountered at St. Petersburg so far as crane and labor facilities and the attitude of Government officials was concerned.

The *Odin* subsequently made three or four more trips when she collided with a Danish steamer and was consequently laid up for some time. Meantime several English and Norwegian ships were purchased by the Russian Government and refitted to serve as carriers for as many as 18 engines at a time. The S. S. S. *Tynemouth* and *Challister* are now regularly calling at the port of Hamburg for this purpose. These steamers picked up the locomotives at the docks

of the Deutsche Werft, needing 10 days for the round trip to Russia. Other boats are plying between the port of Stettin and Russia, said also to carry railway engines.

The German locomotives sent to date to Russia were all built by the firm of Henschel & Sohn, at Cassel, mentioned above. Before being shipped to Russia they are adjusted to Russian gauge and sent complete with tenders (each tender supplied with 5 tons of coal for immediate service). In no case were any engines shipped "knocked down."

There is no evidence of an accumulation of locomotives on local railroad tracks of late other than the ordinary rather large congestion of goods at the Hamburg harbor due to the long freezing period, during which shipping, especially in the Baltic, was held up, and the alleged deplorable road conditions at Hamburg. On the other hand, in order to keep its ports open as long as possible, the Soviet Government is said to have purchased two powerful icebreakers in England which were originally intended to keep the Murman coast harbors clear during the war, but which were only completed after the armistice. From local press reports and private sources it appears that the Soviet Government is doing everything possible to insure regular deliveries of the engines. During the past winter months there was great difficulty, however, in carrying out coaling schedules, and completed voyages between Hamburg and Russian ports were very irregular and infrequent.

As for the financial side, the 720 engines of the first order are said to have been paid by the Russians in advance and the money deposited at a German bank in gold. In the meantime it is alleged by private informants that this order has been increased to 2,000 locomotives. This latter report is not positively verified and may be exaggerated.

It has not been found possible to date to ascertain definitely how many engines have actually been shipped to Russia either via Hamburg or Stettin, but it is believed quite possible that several hundred engines have already safely arrived in St. Petersburg. Considerable difficulty is encountered in endeavoring to get at the truth of this whole situation due to several causes, including the German penchant for concealment and a contrary desire, perhaps, from both German and Russian sources tending to gross exaggeration.

In connection with the foregoing comment on the first shipment of German locomotives to Russia the following brief account of the remodeling and refitting of the *Odin* from a former German war cruiser into a freight ship suitable for such traffic may be of interest. This account is taken from a local technical paper.

While heretofore German warships remodeled into merchant vessels did not prove a success such as was expected in the interest of

economic employment of obsolete warships, in part due to the fact that shipbuilders in tackling this problem considered the shipbuilding side of it rather than operation from the standpoint of the mercantile marine, it is alleged that this problem has now been satisfactorily solved in the remodeling of the *Odin*.

The *Odin* of the obsolete *Ziegfried* class of German armored coast cruisers, scrapped at the beginning of the war and lying idle at Wilhemshafen as a half wreck, was sold by the German Admiralty to the Hamburg Shipping Co., Arnold Bernstein, who in the short time of six months had it rebuilt at the Rustringen wharf of the Deutsche Werke into a motor freight ship.

In commencing remodeling, first the structures on the armor deck were fitted with arrangements of the back, bridge, and poop suitable for housing the crew. In place of the machine and boilers, too heavy for the new purpose, which had given the ship a speed of from 15 to 16 knots, two reversible 6-cylinder Diesel motors of 400 horsepower each, with 350 revolutions, were built in, giving the ship a speed of 10 knots. For driving the four loading winches, the anchor winch, the stearing gear, the pump, and for the heating an auxiliary boiler with 28 square meters heating space and 0.75 square meters roast-bar space was built in. The fuel supply of *Ziegfried* class from the German Admiralty which were to be refitted similarly to the *Odin* at the Rustringen wharf and put in commission beginning of this year.

The following abstract from an article on the first trip of the *Odin* to Russia, published in the Deutsche Uebersesseitung of October 30, 1921, a local trade journal devoted particularly to German overseas interests, would appear to be of general interest, supplementing the above.

The first trip was an experiment in various respects. Even though there were efficient crane arrangements in the St. Petersburg harbor before the war, capable of handling such heavy cargo as the locomotives in question, there was no tangible evidence as to whether or not there were such cranes at present, nor any information regarding their condition, although the representatives of the Russian railroad commission had given assurance that they were in good order. This difficulty, however, it was believed would be overcome by the good seamanship of the captain of the boat. The shipment overseas, too, was a venture without precedent. Although marine experience and shipbuilding arrangements seemed to combine in safeguarding the locomotives put on deck, the usual ship's type which was an innovation, ths loading on deck of the heavy cargo differing widely from the ordinary routine, the heavy ballasting of the deck—these were all questions which could only be solved by the trip itself and the stormy weather likely to be encountered in the Baltic at this time of the year. However, it was proven beyond doubt that the ship and the storing and fastening of the locomotives were up to expectations. The representative of the Russian railroad commission present on board repeatedly wirelessed to his Government his pleasure with the behavior of the ship, recommending the further use of ships of this type.

After the *Odin* had passed the Kiel Canal on September 25, 1921, she encountered stormy weather and a heavy sea in the Baltic which heavily tested her carrying qualities. Before reaching the Finnish Sea, at the request of the representative of the Russian railroad commission mentioned above, the ship sailed a large curve in a heavy sea in order to test its behavior and that of the deck load in any position at sea. The *Odin* proved to be of good stability and seaworthy, taking scarcely any water on deck. The heavy locomotives remained on their bases as if cast on, and the latter did not give way an inch, although the ship listed up to 45°. In addition, the floating mines, still numerous in these waters, together with deficient and faulty coast fires, made the test for the ship's management a rather severe one. On September 29, 1921, the Harwa Bay was reached, where the ship had to wait two days before obtaining a pilot.

After her collision, mentioned above, the *Odin* underwent minor repairs, and is at present plying between Swedish ports and Russia, carrying locomotives built for Russia in Sweden for German order. Besides the *Odin* there are at present six vessels, from 4,000 to 10,000 tons, loading German locomotives for Russia for the Deutsche-Russians Trasport-Gesellschaft, which concern has the contract for their transportation.

According to the shipping company owning the *Odin* a total number of 99 locomotives of German origin has been shipped to Russia to date, whereof 54 to Beval and 45 to St. Petersburg.

GERMAN BATTLE CRUISERS IN THE LATE WAR.

6 May, 1922.

A report of a recent discussion held with officers of the German Admiralty regarding the operations of the German battle cruisers in the Atlantic during the late war.]

The matter was discussed with a number of officers of the German Admiralty, including an officer who is charged with the custody of the archives and with the preparation of the German Admiralty's official accounts of naval activities during the war. The following information was obtained as a result of these discussions:

In 1914, after von Spee's engagement at Coronal on November 1, a memorandum was prepared regarding the possibility of German battle cruisers operating in the Atlantic to relieve Graf von Spee. This memorandum was largely prepared by the navigating officers of the battle cruiser *Von der Tann*, and was worked out in considerable detail. No difficulty whatever was expected from the English blockade forces, as it was considered that the passage north of Scotland could be made during the night. The main difficulty in carrying

out this operation was the lack of bases in the Atlantic for refueling, but this difficulty was to be overcome by making use of neutral ports for the purpose. As the coal consumption of these vessels was extraordinarily high, and as the first operation of these battle cruisers made it essential that the plan of operation consider the feasibility of coaling in neutral ports.

The whole question of refueling was, however, worked out in spite of these difficulties, but the officers who prepared the memorandum above mentioned hesitate to give out complete information on this subject, as it involves neutral powers, and since it is the policy of the German Admiralty to avoid the publication of any material that would compromise neutrals. The mission of this cruiser raid in the Atlantic was to relieve the pressure on Admiral Spee, thus offering a better chance for his squadron to break through to the German bases. The question of these cruisers conducting cruiser warfare in the Atlantic against merchant shipping was at no time considered the primary mission.

The entire project was rejected by the chief of the naval staff for the reason that the primary mission of the fleet was held to be an engagement with the British Main Fleet. Such being the case, a weakening of the main fleet by the detachment of these battle cruisers during the period when an engagement with the enemy main fleets was possible, was considered to be false.

In addition to the above, the necessity for machinery repairs caused the commander in chief to look with grave disfavor on the project in view of the fact that the lack of bases in the Atlantic made such repairs practically out of the question.

No further question of the operation of battle cruisers in the Atlantic was raised during the entire war for the reason that until after the battle of Jutland, the policy of the naval staff was to prevent British cooperation with Russia through the Baltic, and second, to inflict sufficient damage upon the British Grand Fleet to permit an engagement to be fought with reasonable chance of success. After the Battle of Jutland, Admiral Scheer's famous report to the Kaiser, urging unrestricted submarine warfare, determined the future policy of German naval operations. This was to make full use of the submarine weapon to break the moral of the English people and force a separate peace by intensive warfare against all food-carrying vessels bound for England.

In view of this decision, the battle cruisers could not help the submarine warfare but would only hinder them in their operations, the mission of the submarines being held to be the destruction of the largest possible amount of world tonnage.

This policy was persisted in until the submarine was definitely abandoned in the fall of 1918, when extensive operations against the

British Fleet were planned in conjunction with the German submarines. Owing to unfavorable weather conditions, these operations were delayed until the mutiny broke out on two vessels of the fleet. The Germans did not dare at that time to torpedo these two vessels as their loss would immediately become known to the Entente. In addition to this, the naval authorities in Kiel and Wilhelmshaven were not permitted by the Reichstag to take the necessary steps to suppress the mutiny. The appearance of socialistic representatives from the Reichstag in Kiel only served to add fuel to the fire and the mutiny blazed out throughout the fleet; being confined, however, largely to the firemen and coal passers aboard the battleships who joined the striking dockyard workmen. The crews of the submarines and destroyers and small cruisers remained loyal practically throughout until the revolution was in full swing.

In studying the plan of operations of the German Navy during the war, it has continually been impressed upon the writer that the gravest errors were made as a result of the organization of the admiralty and the lack of a responsible officer charged with the direction of naval operations. The fact that the Kaiser insisted upon keeping the supreme command of the fleet in his own hand, forcing the chief of the naval staff to submit his plans for approval, insistence upon the opinion of the Secretary of the Navy, von Tirpitz, being obtained without, however, giving him authority and the political opposition of the chancellor, von Bethmann Hollweg, toward any major operations against England, resulted in placing the German fleet in an impossible situation.

As soon as it was discovered that the British did not intend to use the close blockade of the German Bay, Admiral Tirpitz bent all his efforts toward the fleet, seeking an engagement with the British Grand Fleet at the earliest possible moment. In this he was opposed by the chancellor, von Bethmann Hollweg, and the possibility of a German success in the early part of the war was thus shattered. The commander in chief of the fleet was not given a free hand in operations until 1916 and the reorganization of the German Admiralty did not occur until 1918.

The study of the German naval operations during the war indicates more clearly than any one thing the disastrous results of faulty operations and the catastrophe which must result from divided responsibility.

An excellent account of the German naval policy will be found in Volume I of Der Krieg zur See, 1914–1918 (Kreuzer-Krieg, Band I). Four copies of this volume in the original have already been transmitted to the department and will undoubtedly be found to be of considerable interest to the Naval War College and all officers of the Navy.

ITALIAN SHIPS OFFERED BRAZIL.

10 May, 1922.

Under date of 26 December, 1921, the Italian Government offered four destroyers to the Brazilian Navy at a price of 16,000,000 lire. These destroyers are now in the Italian Navy. Submarines were also offered at prices from 17,000,000 lire to 11,000.000 lire .

Information has recently been received from three different authentic sources that the Brazilian Navy had attempted a couple of months ago to purchase completed war vessels of various types from various European navies, and had been unable to do so.

This information conflicts to some extent with the first paragraph, but the fact of the Italian offer is fully proven and the other statement is probably true in part.

ATTACHÉS IN JAPAN.

Source: Japanese Press.

12 May, 1922.

(Item in Japanese newspaper regarding Capt. Edward H. Watson, U. S. N., naval attaché at Tokyo, Japan, comments on his return to the United States and his connection with Japanese naval officer who attempted to sell him certain secret Japanese publications.)

The naval attaché at the American Embassy in Tokyo on whom there is suspicion of being a naval spy (detective), who has been inspecting the Japanese naval ports and communicating secretly with his Government, is to return to his country.

Following the affair of Kosa Oyama, the nephew of the late Field Marshal Oyama, who sold secret military maps to the American military attaché, Colonel Burnett, it was discovered that Naval Lieut. Tsuruo Mizoguchi, on November 3, 1920, attempted to sell to Captain Watson, the naval attaché at the same embassy, for 1,000,000 yen, plans of mobilization against a certain country, secret military maps of Formosa and Tokyo Bay depth charts, and documents on naval gunnery of 1920.

Lieutenant Mizoguchi was sentenced by a naval court martial on 29 March, 1922, to one year penal servitude for being guilty of attempt to defraud, also was deprived of his official and court rank, and the servitude was to be in the prison at Yokohama.

Captain Watson and Major Gillespie, another officer on duty at the same embassy, came to Japan in March, 1919. It is suspected that up until the time of the Washington Conference, they inspected all of our naval ports and telegraphed secret information to their Government. The authorities were careful as to the movements of both and on the 15 March, 1922, notwithstanding the expiration of their tour of duty had expired, they did not return to their country; and

moreover, they traveled around and were looked upon with more suspicion. Finally, on 13 May, 1922, they will sail for their country. Also Colonel Burnett will return home in August.

MORALE OF JAPANESE NAVY.

28 April, 1922.

The officer personnel of the Japanese Navy is at the present moment in a state of uncertainty, anxiety, and discontent.

This state of mind is due to the naval agreements concluded at the Washington Conference, which put an end to Japan's building of a great post-war navy and consequently to the ambitions and careers of Janapese naval officers.

Since the pay of the active list is barely sufficient, and since the retired pay is only one-third of active pay, the vital aspects of the situation are manifest.

The present plan of the Navy Department is to reduce the officers by 600 to 1,000 and the men by 6,000 to 10,000.

The department is preoccupied with the futures of the officers to be reduced, and the vernacular press reports various plans for the amelioration of their condition.

They will probably be eased down to the retired list gradually, being put on waiting orders at 80 per cent of their active pay from 6 to 12 months and then on half-pay for perhaps another 12 months. The department will also attempt to find civilian employment for them.

It is important to note, however, that all these reductions are tentative and to be made in the future and that to date no reductions as a result of the Washington Conference have been made.

Copied F. S. W.

JAPANESE RACIAL CHARACTERISTICS—A Study of Their Effects upon the Conduct of a Modern War.

12 May, 1922.

(The facts in this report have been checked by the people in Japan best qualified to pass expert judgment on them, and they agreed with practical unanimity on the correctness of the statements herein contained.)

The Japanese are greatly lacking in moral sense. They are always fearful of criticism, possible as well as actual. They are prevented from taking risks or doing anything that may result in "loss of face" (personal prestige). Are unable to maintain any position or take a course of action that would cause loss of face. Approval of their own conscience is not enough; they are always preoccupied with what somebody else may think.

They are hardly able to grasp the idea of standing by a principle. They do not do a thing because it is right, but for personal friendship or to curry favor or to placate a threatening enemy.

In business dealings, they have no sense of fair play; no interest in making the transaction beneficial for the other man as well as for themselves. They do not practice reciprocity. Are always, by heredity, training, and practice, secretive. Are habitually indirect in words and actions, never frank or straightforward with anybody, either their own people or foreigners. In fact they are sometimes more nearly frank with a trusted foreigner than they ever are with their own people.

To understand what they mean, it is necessary always to read between the written or spoken lines (it must, in fairness, be remembered that this they are able to do when they are dealing with one another). In case a manager falls out with his employees, they may complain about him and he about them to higher authority, but the moment an inquiry is instituted they and he will express only admiration and regard for each other.

The situation can only be remedied by a solution that avoids all loss of face by everybody concerned.

They are born intriguers, and acquire phenomenal skill by constant practice. Being too lacking in moral independence to stand alone they form themselves instinctively and by hereditary feudal instinct into groups or cliques for mutual support.

They are totally lacking in sportsmanship. Do not know how to lose; are totally ignorant of how to accept defeat. A defeated minority, instead of accepting the vote of the majority, resigns at once (to save their faces). While they almost invariably exercise quite remarkable self-control, they are extremely sensitive and very high strung and are constantly suffering from injured feelings (all the more acutely from being completely hidden).

They are very slow to forget and do not know how to forgive. Family feuds persist for a very long time. Revenge is practiced habitually. In case a Japanese is injured by a foreigner he will get his revenge on some other foreigner if he can not get even with the man himself; this is true in business as well as in a personal way.

Their minds are incapable, as yet, of being occupied with more than one matter at a time. If they are given anything beyond that they become confused and do nothing. A successful routine worker gets rattled if any unusual task is allotted to him. If something goes wrong in the home, or if the ordinary round of life is interrupted the coolie or carpenter can not work.

Responsibility weighs very heavily upon them as they are entirely unaccustomed to stand alone, and usually results in a physical breakdown. Their physique is poor, and they take no rational steps to maintain their bodies in good condition, but on the contrary work themselves into a state where clear thinking is impossible.

The very idea of failure paralyzes them; they give up at once rather than take a chance that might result in loss of face.

In the case of a forlorn hope when resistance seems hopeless they often commit suicide. Clerks and teachers absent themselves from their work for reasons ridiculous to an Anglo Saxon. From 10 to 20 per cent of a staff are habitually absent for some petty trifling cause, throwing the organization into confusion and inefficiency.

In the middle schools (grammar schools) only about 20 per cent of the boys actually pass their examinations but only about 10 per cent are denied promotion. The remaining 70 per cent have their marks raised by the teachers who spend three days in conference, one agreeing to give another's pupil the lacking mark in mathematics if the other will raise his boy's mark in English. The fact is that only about 20 per cent of the middle school children really pass their examinations.

In the primary schools, where attendance is compulsory, the performance is much more satisfactory.

It is in the primary schools that the 6 to 12 year old child is taught that he is better than other people.

The intense nationalism inculcated at this impressionable age is directed with the greatest solicitude by the Government.

The conditions in the higher schools and universities are better, but education is in a very bad state in Japan. There is no real education at all. The pupils have their lesson explained to them, and take notes and learn the subject matter by heart.

They do not learn to think or to reason. That is why there is such widespread inefficiency. There is no foundation—only slavish imitation. Ideas are only partially assimilated—and almost never developed. A smattering of the subject is all that is acquired Apparently phenomenal progress has been made in many things, but it is far more apparent than real.

The country is run, it would seem, by a few very able men, who organize and direct and restrain, and up to now seem to have had an astonishing, phenomenal success, due largely to a combination of circumstances and to the fact that America and England have accorded them special treatment, to which they were never entitled, and which has, in the final analysis, been harmful to them.

They are not wanting many indications that hereafter the same treatment will be accorded them as is accorded others.

It remains to be seen if Japan can keep up alone with a world that moves more and more rapidly and where solid foundations, both mental and industrial, are needed by the many as well as by the few.

The writer is convinced from the foregoing and from many other reasons that it would be impossible for Japan to carry on a successful war with a great modern power.

The lack of real education, of training and experience, and of the qualities that are built on these as a foundation, puts it beyond their powers to match themselves in any way against the great nations of the world.

Physically and mentally, their leaders would prove incapable of supporting the burdens and trials and strain of a war conducted by a powerful, active, resourceful, and aggressive foe. At the first reverse they (the leaders) would lose the confidence and moral support of the people.

The outstanding good qualities of the Japanese, i. e., loyalty, courage, and pertinacity, while excellent in themselves are insufficient to counterbalance their numerous faults mentioned above.

The Japanese lack of mechanical genius and their custom of doing piecework in the home, will, for a number of years at least, militate seriously against their efficiency in war industry.

One very valuable asset of the Japanese must not be overlooked. They have an extraordinary capacity and practice for mass organization and effort. In time of war this asset would enable them, as in the past, to accomplish big undertakings with a good deal of rapidity and renders them fairly independent of mechanical transportation and production.

What other countries accomplish by machinery, the Japanese do by their abundant man power.

THE RUSSIAN SAKHALIN AS "NEW JAPAN."

27 April, 1922.

"The Russian Sakhalin as New Japan" has been published in book form and a copy of it was received in Berlin about the end of last March by a Russian colonel from a friend in Vladivostok.

According to the colonel's statements the Japanese authorities have bought out all the copies they could lay their hands on and have brought pressure on Merkulov government to destroy the matrix from which the book was printed. Some Russian officers who were active in the book's distribution were arrested and jailed.

"The Russian Sakhalin as 'New Japan,'" aside from a few articles on the Japanese policy in the Russian Far East, is principally a collection of proclamations, announcements, orders, and regulations issued by the Japanese.

A study of these orders and regulations in connection with a knowledge of the nature of the country, density of population, con-

ditions of communications, etc., should give a fair idea of the efficiency of the Japanese administration. The Russian estimates the purposes of these regulations as being to make life impossible in the occupied territory for anyone except the Japanese subjects.

The admitted purpose of the book is anti-Japanese propaganda.

Japan's colonizing policy in the East, which commenced not more than a quarter of a century ago, from the time of the last Japanese-Chinese war, has been developing persistently from year to year according to a certain plan.

This colonizing policy has been developing, in addition, on the basis of international treaties, commencing with the year of 1902, when Marshal Ito went to Petrograd to conclude an agreement with Russia and to divide with her the spheres of influence and economic interests on the shores of the Pacific Ocean.

In place of an agreement, which demanded life itself, he met in Petrograd such an atmosphere, on coming in contact with our diplomacy, that he went directly to England, where he hurried to conclude the well known English-Japanese treaty of 1902.

Although it was said in this treaty that the contracting parties were interested in preservation of independence and territorial integrity of China and Korea, yet during the Russian-Japanese War in 1905 Japan obtained the right to take such administrative measures in Korea as she considered necessary, and there was no longer any mention even of the territorial integrity of Korea, although there was some talk of independence and integrity of China.

The Russian-Japanese War has widely opened to Japan the door in South Manchuria and those who have been in the towns of Dairen, Mukden, and Tchan-tchun could have seen for themselves what Japanese have done where they have had their hands free.

The peace treaty concluded after the war of 1904–5 and some other treaties, which were the result of the Russian-Japanese War, have placed the relations between Japan and Russia outside the international control, and Japan has received, by force of these treaties, special rights along our entire coast, and there was opened to her in this manner a way into Siberia.

Before the revolution, when Russia was still a great Empire, her relations with Japan did not excite any misapprehension and resulted to mutual benefit.

Participation of Japan in the alliance with Russia, England, and France in the Great War with Germany and Austria has placed Japan in an especially advantageous position and her importance in the decision of questions of the Far Eastern international politics was almost dominant.

The revolution in Russia with all its gruesome consequences was followed by Japan's joining the Allies in operations in Siberia. On

the latter's departure she remained the only interventionist on the "Primorie" (Pacific seacoast).

Brutalities committed by bolsheviks in Nikolaevsk on Amur gave the Japanese a pretext to come forward with an open occupation not only in Nikolaevsk but also in the Russian part of Sakhalin, where there was no danger whatever to Japanese citizens, of whom there was only a hundred.

All of these circumstances have led to this, that the Japanese diplomats, who were accompanying the Prince Hirakito on his visit to European capitals, were saying openly that Japan was rtady to recognize all the rights, territorial, political, and economic, in the Far East, acquired by the powers, but that Japan had unquestionably special interests and an exceptional position in Asia.

With an eye to Siberia, especially did the Japanese diplomats emphasize quite definitely that between Japan and Russia existed no treaties which could give the European powers any ground for interfering in the Japanese policy in Siberia, where her ways must be recognized free and open in international respect.

Occupation of the Sakhalin territory and the almost immediately following appearance of Japanese residents and traders along the entire coast is only a proof that the declarations of Japanese diplomats were not only words but also facts.

Occupation of Sakhalin by Japanese authorities was accomplished altogether in the same manner as it was formerly done in regard to Korea by the terms of the Anglo-Japanese treaty, with assurances of friendship between the Russian and Japanese peoples on the principle of mutual respect and integrity of the island of Sakhalin.

After a year and a half from the date of landing of Japanese troops on Sakhalin the Japanese colonization plans are plain to all.

Within one year the Russian Sakhalin was converted into a Japanese Province and the legislative acts introduced by Japanese authorities are incontrovertible documents showing that Japanese promises of territorial integrity were only loud phrases.

It is self-understood that the assistance rendered by Japan to Russia during the war, the expenses which Japan has incurred during the intervention, and the frightful events at Nikolaevsk demanded compensation, but this compensation must be sought on the field of economic privileges and opportunities, but not in violation of territorial integrity of Russia.

The information which follows has been supplied by eye witnesses who have visited Sakhalin in July, 1921, and are based also on Japanese legislative acts, under which are living and are administered the remnants of Russian population on Sakhalin, on military and administrative orders, regulations, and proclamations.

Russian Sakhalin has been converted in one year into a Japanese Province, the best proof of which are the legislative statutes introduced by Japanese authorities on that island.

Sakhalin was occupied by Japanese troops under command of Timono on April 29, 1920.

His successor, Lieutenant General Kozima, after some hypnotizing assurances of his desire to increase the happiness and prosperity of the entire poplation, of respecting as much as possible the former laws and customs, of striving for development of industry and prosperity of the population, followed it up by issuing, on September 25, 1920, a string of administrative orders whereby all the laws defining the rights of property and other rights of Russians were gradually replaced by Japanese laws.

In the wording of his statutes Kozima took a painstaking care to treat the Russian citizens of Sakhalin as abstract beings, finding themselves under the jurisdiction of Japanese military administration, as persons of "other" nationality. In the Japanese statutes, regulations, and orders covering the period of one year the word "Russian" is mentioned only twice: In the statute No. 6 of August 30, 1920, on "civil affairs" and, another time, in No. 16 of same date, on rules re supervision of resident foreigners. In this case Russians were especially honored by being segregated from the category of other foreigners and placed in the same category with Chinese and Koreans.

Commencing with August 30, 1920, there followed a series of legislative acts, which called to mind a locality under martial laws, whereby the entire population, except the Japanese, was subject to war tribunals.

According to statutes on "civil affairs" all the civil and litigation affairs were to be conducted under the laws of the Japanese Empire.

Decisions in all civil matters were intrusted to a "one-man court," regardless of the amount of money involved, under Japanese laws, without the right of change of venue and other elementary rights protecting one from the arbitrariness of a judge, who prescribed the manner of questioning the witnesses and enforced the execution of his own decisions.

All the notarial acts are executed by a judge of the law department of the expeditionary detachment, according to Japanese laws.

On November 17, 1920, all the laws of the Russian Empire re local self-government within the limits of the occupied territory were revoked and there was called into being an honorary institution of local "Starshinas" (elders or village executives) and councils under them. Their duty was acquainting the local population with law

statutes and orders of the new rulers. The council could only express its opinion on questions of administration.

From this time on commenced a campaign against everything Russian, a series of statutes, regulations, and orders by which the Russians were deprived of or limited in their rights of trade, hunting, fishing, industry, and, in general, in their right of gaining their livelihood. In the cases where such permits were granted officially they were fenced in with complex rules and conditions and were very heavily taxed in favor of the Japanese treasury. Every step undertaken by Russians required a special permit and was so regulated that, under the risk and danger of failure of compliance with prescriptions (jail and money penalty), they felt compelled to abandon their old homesteads.

On September 14, 1920, was issued an order limiting the right of possession of real estate. No Russian could buy, sell, lease, or rent his lot of land.

In the case of State lands the lease was conditioned, among other things, with the requirement of erection within a certain time limit of certain structures.

By an order dated February 9, 1921, acquisition and transfer of any rights on property were prohibited and persons violating this order were subject to confinement for a period of one year or a money fine to 500 yens. All those having such rights had to declare them within a certain date and a record of them was made in real estate books.

Not a single branch of labor, industry, or husbandry was overlooked by the new rulers. There were issued, one after another, regulations on hunting and trapping birds and fur-bearing animals, on supervision of mining industry, forest industry on State lands, supervision of coal export, of fishing, on renting fishing and fish-preserving locations. There were even regulations on getting out stone, sand, clay, and other similar products. Nothing was forgotten by the new masters.

No Russian has now the right of engaging in any of those undertakings without a special permission, fenced in with a close observation of all sorts of requirements and formalities as, for instance, a detailed map or plan of locality wherein he desires to obtain sand or clay, with indication of limiting lines and calculations of areas and other information.

All those permits are very solidly taxed and all deviations from the prescribed rules expose one to the menace of jail, which, for instance, in the case of mining industry, extends to 10 years.

All such prohibitions and the way of their carrying into effect are such that for Russian undertakings there is no other way than to be closed down one after another.

Thus, the large Stakheev mining firm saw itself compelled to sell its business to Mitzu-Bishi firm. Not a single Russian now remains on this property.

This Japanese firm is laying its hands on everything deserving its attention, as, for instance, exploitation of Russian State coal mines, which are being worked on a large scale. Steamer loads of this coal are taken to Japan without any accounting of it being kept, with the intent of not having to pay for it to the rightful owner, the Russian Government.

Every step of a Russian citizen in New Japan is burdened with taxes. Every Russian inhabitant of Sakhalin observed in disturbance of public order or violation of customs (a very elastic term) may be compelled to leave the island, the other alternative being jail or a money fine. Entering New Japan is even more difficult than remaining in it. The procedure is such as to compel the most patient man to liquidate his affairs and to depart.

There is nothing more for Russians to do on Sakhalin. They will find nothing to which they could apply their labor. There is no more Russian labor, the Japanese steamers bringing hundreds of their compatriots, evidently not for a short time, as there is going on a feverish work of building in Alexandrovsk and in other places. For the purpose of expediting the work, houses are being brought with complete parts ready to be assembled, entirely adapted to the local climate, with furnaces. The newly erected houses are being quickly filled with tenants, a large percentage of whom are small traders, whose only goods are spirit and vodka. Prostitution, so characteristic of Japan, has made its appearance on a great scale.

Arrivals from Sakhalin state that the Tartar Straits have now the appearance of an inner Japanese Sea; one may see on it a swarm of Japanese steamers, cutters, schooners, etc. They put in to the Russian coast, where the fisheries from Svetlaia Bay toward the north are in their hands. There is being constructed a splendid canning plant. A narrow-gauge railroad is being laid down on Sakhalin to the Naphtha Lake, and so on.

When a Russian steamer attempted to enter De Castri, a Japanese naval cutter approached it and informed the captain: "The Bay of De Castri is closed to foreign vessels, according to our laws."

CRITICISMS OF THE FAILURE OF THE DAIREN CONFERENCE.

12 May, 1922.

Among the various criticisms of the failure of the Dairen Conference, that of the Jiji perhaps is the most pathetic. It loyally lays all the blame on the Chita delegates. It solemnly states that

the Japanese nation does not approve of continued occupation, and argues that it is therefore very wrong to suspect that Japan is staying in Siberia for what she can get out of it. Naturally, this solemn declaration carries no official weight, and the fact of the occupation remains.

It is hardly surprising that the Chita delegates would not take an assurance of evacuation, which was no assurance, especially in view of the fact that for some time before negotiations finally broke down there had been another white invasion of Chita, which started from the neighborhood of Vladivostok, and this having turned out as great a failure as its predecessor, the remains had been rescued by the Japanese troops, who were pursuing the "enemy." The fact that the Chita troops had pursued their enemies into the so-called neutral zone was regarded by the Japanese militarists as sufficient reason for a declaration of war against them, but the more important fact that the white army could never have been formed, refitted, or have got any start at all except by virtue of the protection that it enjoyed behind the Japanese bayonets has never been explained.

It is no use protesting the sincerity of the Japanese and the insincerity of the Russians when the facts stand as they do. It is now almost three years since the Japanese went into Siberia to rescue the Czechs, to check the onward march of the Bolsheviki army officered by German prisoners of war, and to prevent the war stores at Vladivostok from falling into the hands of the soldiers. As regards these three objects, it is significant that when the Czechs finally left they were referred to in the Vladivo-Nippo, the kept paper of the expeditionary force, with most virulent expressions of hatred and contempt; there was never any army officered by German prisoners of war; and as for the war stores at Vladivostok, the Chita Government has lately accused Japan of unlawfully selling them. The expedition went into Siberia in August, 1918. It is still there, and the Japanese troops are marching on Habarovsk. The fact that they evacuated the Trans-Baikal Province is claimed as an act of virtue, but no explanation is afforded of the reason why the maritime province is not also evacuated.

The final reason given for the continued occupation is the necessity of protecting Japanese residents. In the only case in which Japanese residents have been endangered—the proceedings which culminated in the massacre at Nikolaevsk—the whole trouble arose out of the military occupation. Had there been no soldiers at Nikolaevsk the civilians would not have been molested, and had not the military been so high handed they would have been equally safe.

Instead of being protected, Japanese trade in Siberia has been ruined by the occupation. All the Japanese for a long time who

have sought protection are those who are there in Siberia because they make a living out of the occupation.

The Russian point of view is that occupation is wrong. Japan therefore requires that it shall be acknowledged as right so that she may figure as acting generously in evacuating without any obligation to do so. It must be taken into consideration, however, whether the circumstances make such a course advisable. The prolongation of the occupation already to a preposterous length of time, and the almost equally long time it took to perform the evacuation of Shantung—a time largely occupied with recrimination and claims—detract seriously from the saving of face to be effected by the conditions demanded. Mr. Matsushima, a delegate at Dairen, is greatly annoyed at the Japanese press advocating withdrawal. But even the Jiji, which supports him and defends the Japanese against the Chita delegates, believes that Japan's credit depends upon fervent assurance that, whatever the militarists may do, the Japanese people do not like the occupation. It is a sad condition to have got into, and it is difficult to see how Japan is to get out of it except by a frank avowal that she has allowed the militarists too much rope and is determined on a change of policy.

JAPANESE EXPENDITURES FOR NAVAL AVIATION.

28 April, 1922.

The navy has already spent some 9,700,000 yen (including the fiscal year, 1921), for the equipment of aviation divisions.

Under the continuing appropriation and program, the navy was allowed 5,033,000 yen for the fiscal year 1922, but decided to spend during the year 1922 only 300,000 yen, transferring the remainder of the 5,033,000 yen to the period 1923 to 1927.

The original appropriation for aviation divisions was 19,600,000, of which only 9,300,000 has been spent. The total appropriation for naval aviation for the fiscal year 1922 (pay for experimental stations, foreign instructions, aviation divisions, dock airplanes and fittings, and injury allowances) was 1,707,119 yen.

The plans they have been following are for the establishment of several aviation corps each for Yokosuka, Kure, and Saseho, one for Maizura, also for the establishment of balloon corps and aviation training corps. They are bending their efforts to improve the work on this latter branch. From this year on, battle cruisers of the *Kongo* class will be provided with one airplane each. As a result of the naval treaty, it becomes more necessary to improve the aviation branch, and while the restriction is placed on constructions of depot

ships, much will be done, besides the increase of corps, toward construction of planes, study of science of aviation, etc., and thus the aviation program will not be affected by the naval treaty.

JAPANESE TO BUILD DIESEL ENGINES.

28 April, 1922.

The Niigata Iron Works Company has recently built a plant of considerable size at Kamata (a station between Yokohama and Tokyo) for the exclusive manufacture of a modified Diesel engine for submarines and airplane engines.

They just purchased three tons of nickel steel from the Crucible Steel Co.'s branch in Tokyo for delivery at this plant to be used for the making of crank shafts, etc., of these engines.

The above-named company is an old established one which was first engaged in the manufacture of oil-well boring machinery at a plant in Niigata. Some time ago it established a machine-tool plant in Tokyo and during the last year have completed their plant at Kamata.

AERIAL WELCOME TO THE PRINCE OF WALES AT YOKOHAMA, JAPAN.

12 April, 1922.

The aerial welcome to the Prince of Wales on his arrival at Yokohama was largely in the hands of the British Aviation Mission attached to the Imperial Japanese Navy for equipping, organizing, and training the Japanese Naval Air Service.

Under a British officer's command were four formations of aircraft, the first consisting of three Avro seaplanes, the second of three F5 boats, the third of 3 Panthers and 2 Sparrow-Hawks, and the fourth of 5 Sparrow-Hawks.

Led by the three F5 boats, the different formations started from Yokosuka at half-hour intervals, and on picking up the *Renown*, saluted by diving to within 30 feet of the water and climbing again when approximately opposite the warship's bridge.

The salutes over, two of the formations broke up. When the *Renown* reached her moorings, a flying boat was brought into position and an officer made a parachute drop into the water. Other exhibitions were continued until the Prince started on his journey to Tokyo.

JAPANESE SYSTEM OF NAMING DESTROYERS.

23 April, 1922.

It has been the policy of the Japanese Navy to name first-class destroyers after winds (such as "East Wind," "Strong Wind," etc.), and second-class destroyers (under 1,000 tons) after flowers or plants.

This has resulted in some confusion, and the department has decided that in the future first-class destroyers will be numbered with odd numbers and second-class destroyers will be numbered with even numbers.

The *Okaze* and *Tsumujikaze*, building at Maizuru, and the *Karukaze*, building at Mitsubishi, will be the first of the first-class destroyers to be designated by numbers. The *Kakitsubata* and the *Botan* are the first of the second-class destroyers to be designated by numbers.

CIVILIAN MINISTER FOR JAPANESE NAVY.

28 April, 1922.

The following is a translation of an article in the Chugaishogyo of March 24, 1922:

While the army is still opposed to the appointment of civilian ministers for the army and navy departments, the navy is not only in favor of the plan, but has drafted a bill. It is understood that this bill contemplates an extension of the powers of the board of naval strategy, under which will be placed the bureau of naval affairs and the bureau of personnel. The Navy Department will accordingly be contracted and will be concerned principally with accounts, supplies, and upkeep of vessels. This entails a radical alteration in the organization of the department which can not be accomplished by merely substituting a civilian for a naval officer as holder of the portfolio.

In conversation with the Japanese vice minister of the navy, that officer stated that the navy is willing and prepared to accept a change in the law restricting the portfolio of the minister to an admiral or vice admiral.

The army, however, is entirely unwilling to accept any such change and insists that only a general or lieutenant general and an admiral or vice admiral shall be eligible.

The Diet, before adjourning, memorialized the Throne on the subject, begging that the law might be amended to make civilians eligible to the two portfolios.

N. B.—The army is unwilling that the navy should have a civilian minister.

JAPANESE AIRPLANE BUILDING.

28 April, 1922.

It is reported that the Mitsubishi Internal Combustion Engine Works, which has been operating for 14 months, has so far only completed eight acceptable engines. They started on Hispano-Suiza 200-horsepower engines, but have now changed to the same type, 300 horsepower. Their capacity is claimed to be one complete engine a week, but so far their production has been very small.

The Aichi Clock Works produced five planes a month complete except for the engines. These planes are turned over to the Navy Department, which has the engines installed, presumably at the naval station at Yokosuka.

JAPANESE MINE-SWEEPING GEAR.

12 May, 1922.

The mine-sweeping gear and devices used by the Japanese Navy is, so far as can be seen, identical with our own.

Practically all destroyers, torpedo boats, tugs, etc., are fitted for mine sweeping. They use the same kite, kite pennant, and sweep as used in our own Navy.

Some major ships were fitted, during the war, with the British (bow) paravane.

There have been from time to time rumors or reports of improved Japanese mine-sweeping devices, but such rumors have not been borne out by the gear seen in actual use.

STATEMENT BY ADMIRAL BARON KATO REGARDING SMALL-TYPE SHIPS.

12 May, 1922.

Admiral Baron Kato, in a statement to Japanese newspaper men on 5 May, 1922, is reported to have said that Japan does not intend to build additional small-type war vessels allowed by the Washington conference.

The reason given is to avoid the possibility of incurring adverse foreign criticism at this time.

It is believed that the auxiliary craft built in contemplation for the 8–8–8 program is sufficient to meet the requirements as reduced by the Washington conference, and that this fact is an explanation of the admiral's statement.

Admiral Kato's character and record inspire confidence in this statement.

JAPANESE AIRPLANE CARRIERS.

12 May, 1922.

The Japanese press states that work on the conversion of the *Akagi* and *Amagi* into airplane carriers has already begun, but since some of the armor plating must be removed and extensive interior alterations made, neither of these ships will be launched before 1924.

The Japanese Navy expects to make a careful study of airplane carriers before proceeding with the work to any great extent.

NAVY DIRIGIBLE PURCHASED FROM ENGLAND BY JAPAN.

12 May, 1922.

The S. S. model small type flexible airship (dirigible) bought from England, was recently essembled and its motors tested at Oihara on the 3d of May, 1922.

The test was satisfactory in all respects concerning the motors.

The maiden flight will be made on the 10th May, 1922, and will be attended by the minister of the navy and Port Admiral Yamaya.

The gas bag measures 52 meters long, maximum width, 11 meters, and height 16 meters. It can stand the wind blowing at rate of 50 miles. No hangar is needed. Has a seating capacity of five persons. Carries two bomb shells weighing 100 pounds each. Also three machine guns. Has a wireless apparatus with a working radius of 400 miles. Also has a wireless telephone apparatus. Carries five parachutes. Equipped with two motors of 100 horse power each. Speed 50 miles. Economical speed 35 miles. Can travel 1,200 miles on economical speed.

JAPANESE SHIPS TO BE SCRAPPED.

12 May, 1922.

Arrangements are now completed for scrapping of the navy vessels to be scrapped in accordance with the naval treaty and orders will be issued as soon as the treaty is confirmed. Confirmation of the treaty is expected during the present month.

The *Mikasa*, *Asahi*, *Ikoma* will be scrapped at Yokosuka. The *Katori*, *Kashima*, *Aki*, and *Satsuma* at Maizuru. The *Hizen*, *Shikishima*, and *Tosa* at Saseho. The *Ibuka*, *Kurama*, *Settsu*, and *Kaga* at Kure.

The material taken from these vessels will be stored in temporary sheds at each yard.

The *Asahi* and *Settsu* will be used respectively at Yokosuka and Saseho as training ship for naval barracks. The *Iwami*, which goes out of commission on account of having reached the age limit,

will be used at Kure. The *Okishima*, *Mishima*, *Hashidate*, which heretofore have been used as training ships for naval barracks, will be reduced to floating barracks.

CONVERSION OF JAPANESE OBB "ASO" INTO A MINE LAYER.

12 May, 1922.

The *Aso* has recently been converted into a mine layer. She is fitted to carry 950 mines, but now (in peace time) has on board 390.

The mines are transported by two trucks (one on each side of the quarterdeck) and are launched through mine-laying chute over the stern.

The mine-laying record for this ship to date is one per minute. The mines are picked up by cutters. Present record is 10 mines brought alongside in 40 minutes.

The mines are taken on board by hand.

Ninety per cent of the mines on board this ship were manufactured at Maizuru. The remainder are French and English.

Three practice drills are held per month.

NOTES ON WOMEN WORKERS IN JAPAN.

12 May, 1922.

There are 25,000,000 women in Japan; of these 13,000,000 are laborers.

In America, one out of every four earns her living outside of her home. Counting American homeworkers, it might bring the number of women earning their living to 1 in 3. Three-fourths of the 13,000,000 Japanese women (or 8,500,000) are workers.

(1) One million are doing agricultural work (including silk worm workers and rope twisting and rice planting).

(2) One and one-quarter million of the industrial group are factory workers.

(3) One million are in the domestic service.

(4) One million two hundred thousand are employed in commerce and transport (shops, telephones, cleaning).

(5) Three hundred and fifty thousand are professional women and government employees.

Sixty per cent of all the factory workers are women. Japan is the only industrial country in the world where the burden of industry is on the women. It is particularly significant that because of their initial sex burdens, their lower social position, their weaker bargaining powers, and with the majority of the work resting upon

them, the modern industrialization of Japan is a woman problem and in it is vitally concerned the physique and health of the nation. The present health of Japan is poor, and the outlook is critical. Of all the child workers in factories employing 10 or more operatives 82 per cent are little girls under 15 years of age.

Women work an average of 11 hours a day, and during rush seasons they often work 14 to 16 hours a day.

The spinning machines in Japan run at a high speed, and use poorer cotton than in England or America and require closer supervision by the operative.

In 1913, the average daily wage was 30 sen (women workers in factories).

Prices have doubled since 1913, but wages are only 48 instead of 60 sen.

The man's wage is practically double the women's 90 sen.

Eighty per cent of the workers in the spinning factories are women and spinning is the main industry in Japan; 700,000 women are in these spinning factories, and 80 per cent of them live in the factory dormitories (married girls 18 and 20 years of age).

In Osaka, in a factory employing 3,500 women, 3,000 will live in the dormitories.

Spinning factories, the number of women employed is 700,000; ages 15–20 years; their average stay in the factory is one year. They work 11 or 12 hours a day. The average cost of food served is three sen per meal. Eighty per cent are housed in dormitories. The daily output for one girl is 5,549 pounds of cotton per day.

In Kanegu-fuchi mills (best in Japan) meals cost up to 20 sen, and the girls are given free treatment for ailments.

The reasons for the girls quitting work after one year are long hours, monotony of the work, impaired health, and ailments such as tuberculosis, trachoma, and flat feet.

Employers' reasons, the Senic Ann festivals, the family system (marriage).

The girls go into the factory to earn money for marriage, or to help the family.

FACTORY LAW.

1. *Scope.*—Factory law applies to factories of 50 or more employees, to factories engaged in risky or unhygienic work, and to factories employing motive force or doing difficult work. Home work or work in factories under 15 employees is not touched by law.

2. *Working hours.*—Twelve hours a day are the working hours except that in factories employing only men over 15 years of age there is no restriction of hours.

3. *Night work.*—Allowed until 1933. With the prevalence of trachoma, night work means blindness in 2 years, or 10 years with medical care. Within two years the best factories will abolish night work.

4. *Rest days.*—By law two a month, but can be taken away in rush seasons. The Government employees get Sundays.

5. *Noon rest.*—By law, supposed to be 30 minutes, but often disregarded.

6. *Maternity rest.*—Prior to child birth they may be employed with medical approval. Three weeks after birth of a child the mother may again be employed.

7. *Relief to workers.*—Medical attention free and part pay during injury. Total disability, 170 days' pay. Permanent injury, 150 days' pay. Partial disability, 100 days' pay. Death, 170 days' pay and 10 yen for funeral.

8. *Apprentices.*—Age of entry not limited. Must be given character-molding instruction (usually twice a month on rest day by Buddhist priests, who teach contentment). The Buddhist teaches nonstruggle in this life.

9. *Traveling expenses.*—All women and children under 15 years of age are "protected workers" by law. Within 15 days of dismissal they are supposed to be given train expenses to their homes.

The employment agent recruits the girls, buying each a ticket, new kimona, basket, etc. Each must work off her debt and gain enough to buy a ticket home.

When a girl can not stand the factory work, she runs away and goes into a tea house and often into prostitution.

Eighty-two per cent of all the children the factories employ are girls.

The factories come under the department of commerce and agriculture; employs 96,137 girls under 15.

The home department employs 169,197 boys and girls under 15; 80 per cent are girls.

There are 482,000 (half a million) girl child workers; no law protects them.

The match factories, glass factories, textile factories, and Government industries employ an increasing number of girls. The average wage is 30 sen for girls and 46 sen for boys.

Some of the largest employers are not only looking toward giving up night work, but organizing business to obtain legislation to improve industrial conditions in Japan.

POLITICAL UNREST IN JAPAN.

28 April, 1922.

At a gathering of over 2,000 members of the opposition [Kenseikai,], the chief secretary of that party, Mr. Tanomoji, denounced the present domestic and foreign policy and stated the Government's position had become untenable. Resolutions containing the following points were unanimously adopted:

1. Adoption of universal manhood suffrage immediately.
2. Promotion of administrative order and improvement in the morality of the nation.
3. Revision of the foreign policy of the country with a view to enhancing the prestige of the nation aboard and paving the way to peaceful expansion foreign countries.
4. Readjustment of the administration, taxation, and national defense and reduction of taxes.
5. Increase in the appropriations for education.
6. Revision of the economic policy with the object of promoting the development of industry and foreign trade.
7. Execution of plans for the betterment of social conditions so that the living of the nation may be made steady and its thought sound.

Viscount Kato, president of the Kenseikai, declared in his speech that the Washington Conference was an undoubted success as viewed by the welfare of the world, but that it did not particularly benefit Japan individually. He states that much of the danger in the Pacific has been dissipated, but that the political situation in Europe is as chaotic as ever and that the recent Russo-German treaty did not augur well for the future of Europe.

He disposed of the Siberian question by stating that the failure was partly due to the incapacity of the representatives, that the criticism which was directed against the sending of troops to Siberia is still applicable to the retention of the troops—a result of the Dairen conference failure—and that the position of the Kenseikai for a return of the troops was unchanged despite the result of the Dairen Conference.

In regard to the domestic policy, Viscount Kato insisted on the immediate adoption of universal manhood suffrage, a readjustment of the existing system of taxation, and an increased national appropriation for compulsory education.

JAPANESE INTEREST IN GERMAN SUBMARINES.

Source: Reliable.

1 May, 1922.

The Japanese were very much interested in the German methods of cutting mine cables and nets by means of electric shears attached

to submarines. An experimental installation was made on board the *U–52* the latter part of 1917 and apparently was very successful. The commanding officer of the *U-52* stated that on two occasions he passed through the mine fields in the English Channel, cutting at one time 8 mines and at another time 21 mines.

The Japanese learned the names of the inventor and the names of the officers associated with the test of this apparatus. It is stated that they offered the inventor a considerable sum of money for this invention, but that same was not sold to them.

The Japanese repeatedly approached ex-German submarine officers with a view to inducing them to enter the Japanese service in the capacity of instructors. They offered to pay all expenses to Japan together with a very large salary. These offers were refused by all of the German officers in the former German Imperial Navy. He states that in several cases, however, the offer was accepted by three or four former reserve officers. It was learned from the same source that seven engineers previously engaged in the construction of submarines at the Germania Werft at Miel and at the shipbuilding works, Schickau, have since left Germany for Japan to accept positions in the Japanese shipyards. One of these engineers is reported to have taken with him a number of construction plans for the German submarines. It is believed that the Japanese shipyards have at the present time sufficient plans and training constructors to be able to construct good submarines of the latest German types, that is, 2,400 tons displacement.

All German submarines were tested for submergence to 100 meters with large factor of safety. In one case a German submarine was forced to submerge to a depth of 112 meters and no leakage was apparent. The *U–52* submerged at one time to a depth of 86 meters in order to avoid depth bombs from destroyers. No damage.

During the latter part of the war the submarines constructed at that time were built of poorer material than those constructed earlier and therefore did not have the same factor of safety as the older types.

SPANISH PROTECTORATE IN MOROCCO.

21 April, 1922.

HISTORY.

Early in the fifteenth century, by a decision of the Pope, the coast of Africa was divided between the Spaniards and the Portuguese, giving to the Spaniards the Mediterranean and to the Portuguese the Atlantic coast. Following the expulsion of the Moors from the Spanish Peninsula, in 1496 the port of Melilla was captured by the

Spanish, and since that date, without interruption, it has belonged to Spain. The port of Ceuta was conquered by the Portuguese in 1415 and passed to the Spanish Crown in 1580 at the time of the annexation of Portugal by Philip II. The small islands of Chafarinas, near Cabo de Agua and almost in the estuary of the Muluya River, were occupied in 1848 by the Spaniards; the small island of Alhucemas, in 1673; and another small island, Peñón de Velez de la Gomera, in 1508. The above constitutes the Spanish colonial possessions in northern Africa, all of them being established originally as bases for operations against the Moorish pirates of the Rif. From time to time military operations against the Moors have been undertaken, but the Spanish interest in the country, up to the last few years, has always been purely a military one, and no permanent increase in Spanish territory has been made.

In 1859 the Spaniards, whose posts at Ceuta and Melilla had been repeatedly attacked and besieged, declared war on Morocco and sent an expedition from Ceuta, which captured Tetuan. This expedition then attempted to advance from Tetuan to Tangier (which was one of the capitals of Morocco), fought a successful action and opened the road to Tangier. At this point Great Britain intervened and refused to permit the Spaniards to occupy Tangier, and a treaty of peace was concluded which did not give to the Spaniards any territorial advantages. This treaty, however, established the relations of the European nations with Morocco and is the basis for all the diplomatic relations up to the treaty of Algeciras, in 1906, to which the United States was a party, and which made an international city of Tangier and gave to France and Spain the protectorate over Morocco.

No further military operations were undertaken until 1909, when the Spanish army, under General Alfau, advanced from Ceuta and occupied the city of Tetuan (about 25 miles distant), without resistance from the Moors. At this same time an expedition from Melilla, which endeavored to advance into the interior, met with a heavy defeat, with large losses, and the Spanish were forced to retire to the immediate vicinity of Melilla.

In 1911 an expedition was sent by sea to occupy Larache, on the Atlantic coast. This was done without resistance, and the Spanish troops, under General Silvestre, immediately marched to Alcazar-Quiber, about 20 miles inland from Larache, which they occupied, also without resistance from the Moors. At this time the exact boundary between the French and Spanish zones was in dispute, and the French had also sent a force to take Alcazar; they arrived a few hours after the Spanish had taken possession and were not allowed to enter the town. Considerable feeling was caused over this incident, and serious complications might have re-

sulted had not the French decided to withdraw. In 1912, a treaty between France and Spain definitely settled the question of the boundary between the two protectorates.

Other military operations of minor importance were conducted during the period 1909–1912, but these resulted in nothing but cheap decorations and easy promotions for the senior officers and their friends, and a strong feeling was created in Spain against further Moroccan adventures, owing to their futility and cost in money and men.

After the armistice in 1918 France, which under the leadership of Marshal Lyautey had met with notable success in the pacification of the French protectorate, began to push Spain to clear up northern Morocco and to obtain the submission to the Sultan of the many rebellious tribes in the Spanish zone. Accordingly in 1919 Spanish inactivity ceased, and military operations, more extensive than any that had previously been conducted, were begun in both the eastern (Melilla) and western (Ceuta-Larache) zones. The territory occupied by the Spanish troops was gradually extended and efforts were made to pacify the rebellious tribes, strengthen the authority of the native government, and induce the Moors, by peaceful means if possible, to accept the protectorate of the Spanish Government. Although there was little enthusiasm over these operations in the country, the Government was forced to adopt this policy in order to maintain control of the African coast adjacent to her shores, which is generally believed essential for the military security of Spain.

The first stage of the operations met with considerable success, resulting in the submission of many of the most important and warlike tribes, and the campaign progressed favorably. During 1920 an area of about 2,900 square kilometers was added to the territory occupied by the Spanish troops, and the advance in both zones continued in the first part of 1921. This was the situation in July, 1921, when the disaster to the Spanish Army in the Melilla sector occurred. Undoubtedly, the primary causes of this serious blow to Spanish prestige were poor organization, disregard of sound military principles, and the dangerous policy of a divided command in Morocco. The high commissioner in Morocco, General Berenguer, with headquarters at Tetuan, nominally commands all forces and directs all troops, the commanders of the three zones (Melilla, Ceuta, and Larache) being subordinate to him. Actually, the State Department (which has charge of the operations in Morocco) made General Silvestre, commander of the Melilla sector, independent of General Berenguer, who had power only to inspect General Silvestre's operations and recommend measures to him and to the State Department. General Silvestre was really senior in

actual rank to General Berenguer, which naturally caused ill-feeling, particularly as Silvestre was a great favorite of the King, powerful, influential, and a man of great self-confidence, arrogance and, as events proved, very little ability as a military commander.

There are many different accounts regarding the events of last July in the Melilla sector and it is doubtful if the whole truth will ever be known. Without going too deeply into details of the operations it seems fairly certain that the disaster was due to Silvestre's disregard of all military principles in advancing too far into the enemy country with insufficient forces to guard his lines of communication and no troops in reserve at his base in Melilla. It is generally believed that his plans met with the approval of the State Department and the King, but that General Berenguer had recommended strongly against so extensive an advance until the completion of operations in the western (Ceuta-Larache) zone would release troops to strengthen the forces in the eastern (Melilla) sector. However, over the protests of his nominal commanding officer and actuated probably by jealousy of General Berenguer and the desire of the Government and the King to increase Spanish international prestige, General Silvestre proceeded in June, 1921, to advance his lines into a country most difficult for military operations and occupied by strong and warlike tribes of Moors. As the lines advanced, small isolated posts with insecure communications were established, so that it was an easy matter for the Moors to suddenly attack and cut off the Spanish forces from their base of supplies. This they did on July 19, 1921. The Spanish losses were heavy in killed and prisoners and large quantities of artillery and military supplies were captured by the Moors. General Silvestre ordered all his forces to concentrate at Annual and sent his second in command, General Navarro, back to Melilla to get what troops he could together and endeavor to keep open the road from Melilla to Annual. A council of war was held, at which it was decided to retreat along this road, but at the last minute General Silvestre refused to go with his troops, remained at Annual, and is reported to have committed suicide.

Meanwhile, another force of about 2,000 men had succeeded in reaching Sidi Dris on the seacoast. The gunboats *Laya*, *Lauria*, and *Recalde* were sent to this point and an attempt was made to evacuate the position, which was heavily attacked by the enemy. It is not quite clear why a sufficient naval force could not have been sent to accomplish this successfully, although the beach at Sidi Dris is steep and the landing difficult. The attempt to embark the troops resulted in a complete riot, in which practically all of the Spanish troops were killed or taken prisoners, and Sidi Dris fell into the hands of the Moors.

The retreat of the forces from Annual, through Dar Drius and Batel to Mount Arruit, became an utter rout, the whole country which had been only recently occupied rose and completely overwhelmed the Spanish garrisons and mobile columns. General Navarro finally reached Mount Arruit with about 4,000 men out of about 15,000 that originally comprised the force, but here he was strongly attacked by the Moors, who had captured a large amount of artillery from the Spaniards and used it to such good effect that evacuation of Mount Arruit and the continuation of the retreat to Melilla was considered impossible. Although General Navarro held out at Mount Arruit until about August 6, by which time reinforcements from Ceuta and Spain had been sent to Melilla, it was decided that it would be too dangerous to send troops to relieve him and no attempt was made to do so. Finally, General Navarro entered into negotiations with the enemy and surrendered, the Moorish chiefs agreeing to allow the Spaniards to return to Melilla in safety on condition that they would surrender all arms and munitions. However, as soon as the disarmed troops left Mount Arruit they were attacked by the Moors and practically the entire command killed. Some few succeeded in escaping and reaching Melilla and General Navarro and a few others were taken prisoners, but nearly 4,000 were massacred.

Thus the entire Spanish force in the Melilla sector was practically wiped out and large quantities of artillery and military supplies were taken by the Moors; most of the native troops in the Spanish Army went over to the enemy who, encouraged by their success, advanced and took up positions on the hills commanding the port of Melilla. They were deterred from taking Melilla by the presence of the Spanish Navy, though they could have probably done so had they made the attempt. Naturally, this serious disaster created great consternation in the country. From all quarters there was an insistent demand that the treacherous Moors must be punished, the lost territory recovered, and Spanish prestige in Morocco restored, though these demands do not seem to be accomplished by a corresponding enthusiasm for military service. Large forces of troops were sent to Melilla, and in September, 1921, the reoccupation of the zone began. This has progressed steadily, with no serious setbacks, and the advance is still continuing without great opposition from the Moors, whose tactics in general are to take to the mountains when opposed by a superior force and confine their operations to guerilla warfare and attacks on convoys and supply trains. However, the country is not being pacified and is held only by military force.

Since this overwhelming disaster, the question of the governmental policy in Morocco has assumed proportions of great political importance, and there are endless discussions in the Cortes and in the

press as to where the responsibility for the mismanagement of Moroccan affairs should be placed and what the future policy should be. Spain's chances of gaining control of Tangier or at least preventing the French getting it, which is the dominant note in the foreign policy have been decidedly weakened and great anxiety is felt, in the event of Spain being unable to successfully pacify her protectorate and to develop its natural resources, that France will step in and insist that Spain relinquish her protectorate in northern Africa. This would not only be a serious menace to Spain from a military point of view but would be a great blow to her international prestige. On the other hand, the war is not popular, is costing enormous sums of money, which the treasury can ill afford, and there is a strong demand from some quarters that the army be withdrawn from the interior of Morocco and limit its activities to the occupation of certain bases along the coast. The prisoners now in the hands of the Moors add to the complication of the situation, for there is a strong feeling that these must be repatriated and the Moors punished for their treachery.

It is a difficult problem for any Government to solve, and the many changes or rumors of changes in the Government and in officers in high command do not seem to improve the situation. Recently it was reported that General Berenguer, the high commissioner in Morocco, was to be relieved. He came to Madrid, and after lengthy conferences, it was announced that an agreement with the Government as to the political and military action to be taken in the protectorate had been reached, and he returned to his command. Although no official statement has been issued, a reliable press report states that "the Government has decided to reduce military operations to a minimum, to foster the development of a colonial army on a voluntary basis, and invite the Moors to cooperate more freely in the administration of the protectorate; all of which implies a considerable modification of the policy recently pursued."

GENERAL CHARACTER OF THE COUNTRY.

The Spanish Moroccan country, except for a narrow strip along Atlantic, is very rough and much of it mountainous. These mountains parallel the coast of the Mediterranean. The highest peaks are about 3,000 feet above sea level. The highest ranges are bare limestone, but some of the lower ranges and the valleys are fertile and are under cultivation. There are mines of iron and lead and there are many rumors of great mineral riches in the unexplored parts. The country is not dry and the northwest peninsula has a heavy rainfall. There are no large rivers and the size of the small

streams varies with the amount of rainfall, which is greatest between the months of October and May. The climate is temperate.

PEOPLE.

The Moors are a white race and are believed to be of the same stock as the ancient Iberians. The majority is crossed with Arab and Negro, so people of all shades of color are seen, from pure white to very dark. The Moors have no patriotism, but have a strong sense of independence and racial and religious pride. They are fanatical and treacherous. The Moor is fond of money and will do a great deal to get it. The principal occupations are farming and raising cattle and sheep. Much of the business of the country is in the hands of Jews, who are despised by the Moors and have always had to suffer many indignities. War is the highest calling and the one pastime of the Moors of the mountains. The Moor does little manual labor, leaving that to the women and old men. His every effort is to get a modern rifle and ammunition, and he will stop at nothing to do this. He is an excellent shot, hardy and frugal, and a dangerous fighter.

GOVERNMENT.

Nominally the government is under native control, based on the Koran and on the ancient clan customs of the Moors, but in the territory occupied by the Spanish forces the government is actually in the hands of the Spanish high commissioner, with headquarters at Tetuan, who governs in the name of the Sultan, and has a Khalifa, a brother of the Sultan, associated with him. The "Servicio de Asuntos Indiginas," which includes the native police, with Spanish officers, is the organization through which the high commissioner administers his government.

Spanish Morocco is divided into three regions of Ceuta, Melilla, and Larache, which are administered from Tetuan, Melilla, and Larache, respectively. Between the Ceuta-Larache zone and the Melilla zone there is a no-man's land, extending about 75 miles east and west from the Mediterranean to the boundary of French Morocco, of unsubdued territory, which is slowly being added to the organized regions. The central portion of the Ceuta-Larache zone is also unsubdued but is gradually being occupied by the Spanish troops.

The generals commanding the regions of Larache and Melilla also administer civil affairs. The high commissioner at Tetuan administers the region of Ceuta directly. In each region there is a colonel or lieutenant colonel, "Chief of native affairs," who has the detail of administration in his hands and who is under the chief of staff of the high commissioner, who manages this service. Associated with each administrator is a kaid, or representative of the Khalifa.

COMMUNICATIONS.

The country is very deficient in communications, and many of the roads are impassable in bad weather. In general, the roads in the Melilla district are good; those in the Ceuta-Larache sector are bad, with the exception of the road from Ceuta to Tetuan.

The railroads are generally 1-meter gauge, well and substantially built, with equipment mostly German and Spanish. The road from Rio Martin to Tetuan, which is now being extended to Fondak and Xauen, is only 60-centimeter gauge.

A railroad is now under construction from Tangier, through Arcila and Larache, to Fez, but work is progressing slowly.

The following cable communications exist in Spanish Morocco:

Ceuta–Estepona (near Gibraltar).
Ceuta–Vélez de Gomera.
Vélez de Gomera–Alhucemas.
Alhucemas–Melilla.
Melilla–Almeria.
Melilla–Malaga.
Melilla–Chafarinas.

SEAPORTS.

In general, the coast is rocky and steep, with few good beaches for landing. However, the shore line south of Ceuta, along which the railroad runs, has an excellent beach, where a landing could be made with no great difficulty. There are three seaports—Melilla, Ceuta, and Larache—of which Ceuta, from its geographical location and character of its harbor, is by far the most important. In the development of the port of Ceuta, Spain is being encouraged and assisted by the British, in order to offset the efforts of the French to make Tangier the important seaport of this locality.

PROPOSED SPANISH LANDING OPERATIONS AT ALHUCEMAS.

12 May, 1922.

[Comments by a distinguished rear adminal of Spanish Navy relative to proposed landing operations at Alhucemas and the conduct of the war in Morocco.]

The following more or less literal translation of this interview is of interest:

Will we make a landing in Alhucemas? we asked.

I do not know; it is much talked of, but it appears to be very difficult to make a decision. If a landing was to be made, it should have been done last August; but even yet it is not too late.

And why not land?

Because the fact that we control the sea has been ignored in the plans for the land operations. The naval forces we are employing are inappropriate. The coal consumed in one day by the *España* at economical speed would supply a trawler for 30 days. The expenses of personnel and maintenance of a battleship for one month would purchase two trawlers. A trawler costs 180,000 pesetas. If last August we had bought 16 or 20, they would now be paid for, since we would have saved the amount employed for battleships and cruisers.

On the other hand, we have three cruisers, third class, the *Extramadura*, *Río de la Plata* and *Infanta Isabel*, that ought to have been repaired. With these and some others similar though better, which might have been acquired for little money, and the seven gunboats that we have, the Navy would render better service and we would not be wearing out matériel more expensive and delicate—battleships, cruisers, destroyers, and torpedo boats—unsuitable for the character of our aggressive action in Morocco and the maintenance of which costs millions. We have fired with guns of 30.5 centimeters (it is well to add that we buy the projectiles in small lots, with the result that at times the battleships have no ammunition with which to fire) in order to destroy old adobe houses that are not worth 1,000 pesetas. As every shot costs 3,000 pesetas, it is a quite expensive target practice. Besides, to employ battleships as if they were stationary batteries of artillery is expensive. A single battery of artillery has two pieces more than the broadside of the *España* and the difference in cost is enormous.

Do you mean to say that we are conducting the war badly?

Exactly; we have managed it very badly ever since 1909. We have followed the same plan employed during the eight centuries of our reconquest. We possess Mel'lla, the Peñones, Ceuta, Arcila, and Larache and we can, almost with impunity, take possession of all the points on the coast that we deem necessary. Well, in spite of this and of the fact that our base of operations is on the coast of Spain and our line of communications entirely free, our bases were establ shed in Melilla and Larache and Ceuta.

The key of the war? The Beni-Urriaguel. (NOTE.—The country in the vicinity of Alhucemas.) From Malaga, a 10-hour sail, at 9 miles per hour, and we would be at Alhucemas. Regardless of this, it was decided to reach the Beni-Urriaguel country by land from Melilla, traveling 100 kilometers and crossing a rough mountainous and unknown country. Twelve years we have consumed in traveling these 100 kilometers, and we ought to have done it in half a day!

And the losses?

The landing will cost us from 200 to 300. In 1909, effecting it by surpr'se, they would not have exceeded 30 or 40.

The losses sustained in the journey by land have been thousands; the expenses, millions. It is similar to the campaign of 1859. O'Donnel did not wish to follow the opin'on of the admiral of the fleet, and we took five months in going from Ceuta to the vicinity of Tetuan, to end where we ought to have begun—the bombardment of Río Martín, the land'ng of one division, and capturing Tetuan almost without resistance.

And are we prepared for the landing?

Yes; we have the facilities to land 100,000 men, for it is not necessary to transport them all on one trip, when the passage requires only a few hours and the disembarkation need not be effected in one single body.

From reading descriptions of our landings in ancient times, and from the recent ones of the Allies in the Dardanells, one may form an idea of how easy

are these operations if they are well planned. And something must always be left to chance, as Horace said, and as don Alvaro de Bazán repeated and practiced.

NOTE.—This interview neglects to state that Melilla, Ceuta, and Larache were obviously selected as bases for the operations in Morocco, as being the only protected harbors. While a landing might be effected at other places along the coast of greater strategic value in the campaign, it would be a very difficult matter to supply an army of any size from a base totally unprotected from the weather. Judging from the present activities of the Moors, the estimate of the losses in the landing would seem to be very optimistic. As previously reported, I do not believe that the landing at Alhucemas will be undertaken.

USE OF SUBMARINES IN OPERATIONS ON MOROCCAN COAST.

7 May, 1922.

Since the attack by the Moors on the Spanish forces on the island of Alhucemas both this position and the other small Spanish garrison on the island of Peñon de Vélez de la Gomera, about 30 miles to the westward, have been continually bombarded by the enemy.

Peñon de Vélez, in particular, has been subjected to very determined attacks. It is situated very close to the shore, and at one time the Moors threatened to effect a landing on the island.

Under the circumstances, it was decided to evacuate the civilian population of the Peñon, consisting of about 102 persons, who were in great danger from the intensive bombardment of the enemy. This operation was conducted by the battleship *España*, the gunboat *María de Molina*, and the submarines *Peral* and *B–1*.

On the first night of the operations the *Peral* left the *España* after dark and went alongside the landing at the Peñon de Vélez. Here the presence of the submarine was discovered by the Moors, who opened a heavy fire, in spite of which 77 passengers were embarked without casualty. The *Peral* then shoved off, submerged, and transferred the passengers to the *España*. On the following night the remaining 25 civilians were taken off in a similar manner by the *B–1*.

The officers commanding the submarines have been highly commended and decorated for their bravery.

CRITICISM OF SPANISH NAVAL PERSONNEL.

13 May, 1922.

The military services are not generally popular with the public in Spain. There is a feeling that the money appropriated for national defense is, to a great extent, wasted and that the Army and Navy exist largely for the purpose of furnishing comfortable billets and

high rank for the sons of influential families. What is particularly criticized by many writers is the large number of officers of high rank in both services, which is out of all proportion to the actual requirements. Many of these high ranking officers hold positions of no real importance, being created merely as an excuse for keeping all of the generals and admirals employed.

Recently a well-known naval critic, who writes for the press under the name of "Juan de Aragón," wrote a scathing criticism of the ministry of marine for ordering lieutenant commanders (capitáns de corbeta) to command nine small motor launches acquired by the Navy for the patrol of the Moroccan coast. He stated that during the war similar boats were commanded in England by chief petty officers or ensigns, and that, by these orders, the ministry of marine was merely trying to justify itself for keeping so many officers of high rank, who are absolutely unnecessary and a useless expense to the Government. Replying to an article which attempted to defend the navy department against his criticism, "Juan de Aragón" writes in Informaciones of to-day:

Not only are these recent orders of the minister of marine (referring to the command of these small patrol boats by lieutenant-commanders) most absurd, but the worst of it is that all of the so-called "affairs of the Navy" are equally as absurd as these orders.

If we do not count the ships which are unable and never will be able to navigate, such as the *Pelayo*, our fleet is reduced to 3 battleships, 3 cruisers, 3 small cruisers, and about 30 gunboats, destroyers, torpedo boats, and submarines. In order to make the facts perfectly clear, I should state that all of these vessels from the battleships down to the submarines are of an antiquated type, and that in reality we have not one single modern fighting unit; even those that have not been completed can not be compared with similar foreign ships, for the simple reason that their designs are now 14 or 15 years old.

Ample proof is available to demonstrate the truth of this statement; however, it will be sufficient to state that the cruisers *Carlos V*, *Princesa de Asturias*, *Cataluña*, *Reina Regente*, and the small cruisers, *Extramadura* and *Rio de la Plata* were under construction for nearly 30 years. The battleships date from the periods of the first program of naval reconstruction, and this program is nearly 20 years' old (NOTE.—A slight exaggeration on the part of the author, the program being laid down in 1908). Is anything further necessary to demonstrate that at the present time wo do not possess a single vessel worthy to be called a warship?

For this material, more or less unserviceable, with which could be formed at most one naval division, we have an appalling number of vice admirals, rear admirals, captains, commanders, and lieutenant commanders. Not content with having all these on the navy list, there have been invented a lot of billets with large salaries and allowances, such as the three captains-general of the departments, in which there are no squadrons, even though admirals are kept there to command them.

This and nothing else is the sad truth, and to this alone is due the fact that the patrol boats for the African coast have been made lieutenant commanders' commands, when at most they should be commanded by ensigns.

Everything, absolutely everything, that has been done in the ministry of marine for many years has had no other object than to create unnecessary offices in order to increase the personnel. Instead of creating an efficient organization of our naval forces, with consideration for the actual needs of the present time, the ministers devote themselves to glorifying the personnel, and each new disposition is made for the same end, to find positions for more people. Even the bureaucratic billets, reserved for the shore-duty-only list (Escala de Tierra), have been little by little filled by officers of the sea list (Escala de Mar), just as if the former did not exist.

I have always believed that nothing is useless, and for this reason I have always fought, without respite, against the errors of the Government, in so far as they affect the navy. Of what use are antiquated vessels that would be destroyed within five minutes by enemy gunfire? What good does the nation derive from ships which can not navigate and are useless for the service? What advantage is there in maintaining an organization without head or tail, with a notoriously unnecessary personnel? Is it conceivable that a country without any squadrons would maintain three captains-general, with all the elaborate organization that a captain-generalcy requires? Is it not opposed to our common sense to witness day after day how the money of the taxpayer is misspent, without any intelligence, for the sole reason of keeping up the absurd fiction that we have a Navy useful for war?

Those gentlemen who have endeavored to refute my statements will waste time looking for arguments and sophistries with which to meet them, and moreover those who read their defense will merely laugh. Regardless of what they say, it is absurd that the patrol boats to which I referred should be commanded by lieutenant commanders. It is equally as absurd as if in the army a major should command a platoon or a colonel a company.

However pathetic and sad it may be, the truth is the truth. Is it my fault that it should be so?

The opinion of the writer concerning the fighting value of the Spanish Navy would seem to be very nearly correct. Notwithstanding this fact, there are now on the active list in the line of the navy the following officers of command rank:

Sea duty list:	
Admiral of the navy	1
Admirals	5
Vice admirals	9
Rear admirals	13
Captains	30
Commanders	58
Lieutenant commanders	128
Shore duty only:	
Captains	25
Commanders	37
Lieutenant commanders	106

The total estimates for the navy for the present fiscal year amount to 132,902,671 pesetas, the equivalent of about $25,650,000 at normal rate of exchange (0.193).

TRIAL OF SPANISH AIRCRAFT TENDER "DÉDALE."

7 May, 1922.

The trials of the converted aircraft tender *Dédale* have been completed off Barcelona.

This vessel was formerly the *España 6*, one of the German ships acquired during the war. In addition to being a tender for aircraft, she is equipped to carry dirigible balloons. On this trial, a dirigible towed by the ship was successfully lowered and stowed in the compartment below deck provided for this purpose.

CONDITIONS IN SANTO DOMINGO FOR PERIOD 1 MARCH TO 31 MARCH, 1922.

Military situation.

In the northern district conditions were generally quiet. A few scattered groups of bandits have been reported as operating in the section of El Valle, La Loma, and Las Canitas. These were constantly pursued by both marine and policia forces, and one contact was effected by a marine patrol between Agua Tica and Vicentillo.

In the southern district no reports of bandit activities were received during the month. This can be largely attributed to the patrol operations carried out by the marine outpost stationed at Guerra.

In the eastern district a number of depredations and robberies were committed by organized groups, although bandit operations have been greatly curtailed by constant patrolling and by the extensive operations conducted. Leaders still continue to recruit followers, and have little difficulty in doing so due to lack of employment and present economic conditions. The closing of the cane cutting season, now imminent, will no doubt increase the number of active bandits. Records during the entire occupation show that the sudden throwing out of employment of the large number of men by the closing of the sugar season, some two months earlier this year than normally, has resulted in a certain part of these men taking to the "bush." The unsatisfactory economic conditions now prevailing favor an unusual increase in lawlessness this year.

It is impossible to accurately estimate the number of unauthorized arms in the country. What arms the bandits have are in fair condition, but their supply of ammunition is limited and of poor quality. It is probable that small quantities of arms (revolvers) are smuggled into the country from time to time.

The following permits for arms, shown by districts, were in effect 31 March, 1922:

	Revolvers.	Rifles.	Shotguns.
Northern district	969	8	234
Eastern district	288	25	131
Southern district	420	2	484
Total	1,677	35	849

Economic situation.

The economic situation remains unsatisfactory. Tightness of money and the unemployment conditions are the contributing factors. This last condition will be augmented by the closing of the sugar season.

Transportation and communication remain the same.

Political situation.

Political parties and their leaders remain the same viz:

Party.	Leader.
Nacionalista (Horacista)	Enrico Jimines.
Progresista Velazquista)	Federico Velaquez.
Unionista (Jimenista)	Horacio Vasquez.
Henriquista	Foo.Henriquez y Carvajal.

Little change can be seen in the political situation. The proclamation of March 6 has been a fruitful subject of conversation, but the Dominicans, as usual, are too busy dickering among themselves to take concerted action. A system of calumnious propaganda against the military government and the forces of occupation seems to be their only idea of a means to gain their ends.

The invitations of the ayuntamiento of Santo Domingo City extended to the other ayuntamientos of the Republic to attend a convention to outline a policy to be followed in the work of the restoration met with rejection. This is a good example of the distrust and suspicion with which one section of the country, or one faction, meets any proposals from another source. It is, and always will be, impossible for the Dominican people to "pull together" for any purpose whatsoever.

Psychologic situation.

There were four cases of friction between the troops and civil population in the eastern district during the month, all of which were immediately investigated and the offenders punished.

In the southern district, the night of the 18th of March, a native was found dead in San Francisco Street, Santo Domingo City. Investigation disclosed the fact that he had been knocked down by a sailor and his neck broken. The sailor was apprehended and is awaiting trial by court-martial.

No cases of friction were reported in the southern district during the period.

The press and political agitators still continually attack, upon the slightest provocation or without provocation at all, the military government and the forces of occupation. The country people, as a whole, are friendly.

Miscellaneous.

The smallpox epidemic has practically ended.

General impressions for the period.

That the proclamation of March 6 has more nearly shown the Dominican people that the Government of the United States is serious in its intentions than any single act since the occupation, although it has not stopped the lying propaganda and scurrilous articles put forth by the politicians and the press.

THE CRANE INCIDENT IN DAMASCUS, SYRIA.

Source: Reliable.

The Province of Damascus has been commercially crippled by the French occupation, not only because of cutting off the trade with southern and eastern States, but also because of the general French policy of grinding down the better classes and overtaxation. In other words, they have treble taxation; even the donkeys and camels that come to the city have to have a tax paid on them. In a nutshell, the Province is throttled and gradually going to reduce until it will be a comparatively small section.

The French are generally in bad order and getting worse. The Syrians say that this demonstration with the aftermath has been the best thing that could have happened. For it has only served to unite the population more forcibly together.

The civil officials are of a low type and strictly as a whole "backshish" men. The taxes are supposed to be squandered one-third to the collector, one-third to other officials, and the balance to the real purpose for which collected.

The roads about here certainly show not only a lack of work, but an entire absence except the one to Beirut—this one the French use very much themselves.

The Christians of the Lebanons wanted the French originally, but now they do not. The Nationalist Mohammedans want entire independence, but the Christians want protection from America or England, in the order given. This latter statement about the Christians is not confirmed. Shortly after the French came into western Syria, they found it necessary to obtain control of the railroad to

Aleppo, in order to transport munitions to fight the Turks—thus they promptly occupied Baalbeck and took possession of the railroad. The Allies forced them to give this over. Later on, when this question began to press the French and they were allowed to take eastern Syria under King Feisal of Damascus, they made the following demands on the King: (*a*) To place paper money in circulation and withdraw the gold. The same old method as at Constantinople.

Now all the gold has been shipped out of here to France.

(*b*) Allow French ammunition to pass through eastern Syria. Hence to get control of the railroad.

(*c*) Appoint French advisers to the government.

(*d*) All Nationalists to be delivered over to the French.

(*e*) Demobolize their army (they didn't want much).

Before the French came in they distributed circulars from airplanes to the effect that the French would lower their taxation, and treat them better than Feisal. This order was signed by General Gouraud. Immediately after they came here, they levied taxes on 200 of the richest men to the tune of about 40,000 Syrian pounds. If they didn't pay they were threatened with being arrested, hence they paid. After this, the taxes mounted and eventually in order not to get into too much disfavor with these men, they were paid back.

The young lady for whom Mr. Crane left $1,000 check with Doctor Chabender, had with her just prior to going into hiding, a little orphan girl of 13. In attempting to disclose her whereabouts they took the little girl of 13, and not only locked her up for two days in prison but gave her some of the very severe tests of the third degree, namely, threatening her with having to sleep in a coffin in the graveyard over night. They had the coffin in the police station. They also stuck a revolver to her head and tried to make her fess up, but she only replied that she couldn't tell what she didn't know. This woman that I am speaking of was wanted for writing several letters to her friends in Haifa, perhaps she was mentioning some of the local color of Damascus in them.

In the first place the general court-martial was held publicly for the purpose of intimidating the people. The court was composed of not especially high ranking officials. No record was kept officially of the proceedings, but some outsiders kept notes. There was no real evidence produced to convict any of the several men tried but all were sent " over the road," for from 10 to 20 years. They are still making arrests and still convicting. I also learned that one of them was an Egyptian. The only thing that could be found on Doctor Chabender was a check that he had received from Mr. Crane to get this girl out of Syria and send her to school. Of course they made a mountain out of a molehill and said that " Here is a man who has money given him for the purpose of anti-French work," etc.

Mr. Crane held a private talk with some of his friends whom he had met when he was here on a commission in 1919. He re-met them again this time. Doctor Chabender was one, and after he talked with Mr. Crane, in private, he seemed unusually jubilant and pleased for it seems that naturally he is a very serious minded man, and not accustomed to show openly any feeling. Doctor Chabender was not to tell his wife any of the conversation which transpired between him and Mr. Crane. The remainder of the committee of 20 women that saw Crane in 1919, met him again privately this time. Mr. Crane was also present at three or four garden tea parties with some of his friends, and perhaps some idle curiosity seekers. Also present were policemen and spies who watched every move.

When Mr. Crane got in his car to leave the Palace Hotel on the 6 April, a number of his friends came to see him off. Among the number was Doctor and Mrs. Chabender, two Syrian ladies—these four stood on the running board of the car while car moved slowly to the Victoria Hotel. I might add that Mrs. Chabender and one of the ladies came to the hotel to bid Mr. Crane good-bye, and when they arrived he was already in the car. So, naturally, as any other human beings, they proceeded to the automobile.

I am told that the police force placed some hoodlums in the crowd to yell "down with the chief of police and the government." The crowd became more or less excited and some of them took up the cry. This demonstration proceeded to the Victoria Hotel where Mr. Crane bade them farewell. Before he left, a poor Egyptian made a speech in which he said that Syria and Egypt were brothers and that Syria should do as Egypt has done to gain her independence. It is generally conceived that the French felt uneasy about the situation before Crane came, and that they wanted any pretense to show the Syrians the French power and methods of stamping out any political demonstration.

After the car left, the crowd lifted Doctor Chabender on their shoulders and carried him about. All this time he was pleading with them to let him down for he feared the consequences. Doctor Chabender is a Syrian Mohammedan. He remarked to his wife, that "Now that Mr. Crane has left, I wonder if they will arrest me?" He was not disappointed, for he was promptly arrested about sunset of the same day.

Mrs. Chabender, her brother, and I had a very pleasant conversation. When she entered the room, I said in my best French, "Sit down, madame." She told me that if she knew French she surely would not degrade herself by talking it. She is an intelligent woman with a sparkle of real life. (As Doctor Nickely told me later, "She is a real brick"—this not meaning what I thought it did, however, for his interpretation is that she is a jewel.) She says that she isn't

afraid, all that she wants is for the French to give her 30 years. She laughingly said, "They should give me 40 years for talking to you, for I have an example of my husband talking with an American and he only got 20." When I was bidding her farewell, at the American consulate, she said, "I wonder if they will arrest me when you go as they did my husband when Mr. Crane left?"

Doctor Chabender is one of the most prominent men in Syria. He left a wife and four children, but they are well provided for.

I asked several prominent Syrians in Damascus who I could see in Beirut; they replied by saying that all prominent Syrians in Beirut had been arrested.

THE NEAR EASTERN SITUATION.

Source: Pronouncement by Allied Ministers of Foreign Affairs.

27 March, 1922.

The foreign ministers of the allied powers, France, Great Britain, and Italy, having during five days in succession discussed every aspect of the situation in the Near East, having consulted at each stage the military and financial experts who were summoned for the purpose; and having, further, enjoyed the advantage of communicating beforehand with the representatives both of Turkey and of Greece, have unanimously agreed to the following propositions, which they put forward as the most equitable solution that it is in their power to offer to the near eastern problem.

The principles which they have throughout borne in mind, and which are the bases of their proposals, have been:

1. The desire to reestablish peace between the conflicting armies of Turkey and Greece, but to deal fairly with both parties, and to impose upon neither conditions of discomfiture or defeat.

2. They desire to reestablish the Turkish nation and the Turkish dominion in the areas which may fairly be regarded as their own, with the historic and renowned capital of Constantinople as the center, and with such powers as may enable them to renew a vigorous and independent national existence.

3. They desire to secure full and fair treatment to the followers of the creed of Islam and to maintain the secular and religious authority of the Sultan of Turkey.

4. They desire to compensate the Greek nation for the great sacrifices which they have accepted during the war in the cause of the Allies, and to leave them free scope for their national and economic progress in the future.

5. They desire to enable both peoples, in regions where they are contiguous or where their populations are intermingled, to live in future in conditions of mutual confidence and self-respect.

6. They desire to provide for the protection and security of the various minorities, whether Moslem or Christian, or of other races and creeds, who, whether in Europe or Asia, find themselves placed in the midst of larger political aggregations.

7. They desire to prevent the recurrence of armed conflict between the Turkish nation and the European powers with whom it was recently at war.

8. They desire above all in the solution which they propose not to be suspected of partiality to one side or the other, but with firm hands to hold the scales even between the two.

With these ends in view, the first object of the Allied powers has been to bring about a suspension of hostilities between the confronting armies in Asia Minor, in order to enable the counsels of peace and the prospects of an amicable settlement to prevail. They have therefore proposed the conclusion of an armistice to the Government of Turkey and Greece, subject to conditions which are scrupulously fair to both parties and which were defined by the military authorities under the presidency of Marshal Foch.

The Hellenic Government has already signified its acceptance of this proposal. The decision of Turkey is awaited.

The proposal of an armistice has been made with the avowed intention of assuring the peaceful evacuation of Asia Minor by the Greek forces and the restitution of Turkish sovereignty over the whole of that nation. The arrangements for this evacuation, as the first step in the general settlement which is now proposed, have simultaneously been elaborated by the military authorities under Marshal Foch, and are capable of being put into execution without delay. It is calculated that the period required for a complete and peaceful withdrawal of the Greek forces will be somewhat over four months.

It will be observed that, in the event of these proposals being accepted by both parties, the recovery of Anatolia by the Turks, which is believed to be their principal national aspiration, will have been attained without any further sacrifice of treasure or life. Correspondingly the retirement of the Greek troops will be effected with honor.

Should this operation be successfully accomplished, the Turkish sovereignty in Asia will exist unimpaired from the Mediterranean to the Straits and the Black Sea, and from the borders of Transcaucasia, Persia, and Mesopotamia to the shores of the Aegean.

Accepting the imperative necessity, which is the result both of historical and geographical causes, for the protection of the minor-

ities of alien race or religion who are found, in some cases in large numbers, both in the vilayets of Turkey and in the European possessions of Greece, the powers have proposed a series of provisions for their full and adequate security, without distinction of race or creed, in both areas. These provisions will be based both upon the stipulations contained in existing treaties or drafts of treaties and in the secular or religious law of the countries concerned. Furthermore, the powers have decided to invite the League of Nations to collaborate in this object by the appointment of special commissioners to superintend the execution of these provisions in the areas and for the communities who are principally concerned.

The case of the Armenians has called for special consideration by reason both of the undertakings entered into by the allied powers in the course of the war and of the cruel sufferings of that people. Accordingly, the aid of the League of Nations is sought, over and above the protection accorded by the minority provisions to which reference has already been made, in order to obtain for the Armenians the satisfaction of their traditional aspirations for a national home.

The interests of peace and the safety of the future demand that Europe shall never again be exposed to the perils and sacrifices which were imposed upon her in 1914 and the succeeding years by the forcible closure of the Dardanelles. The countless lives that were there poured out, the stupendous efforts that were entailed, must not have been expended in vain. The Turks will be readmitted to the Asiatic shore of the Dardanelles under conditions which will provide for the existence of a broad demilitarized zone, in order to obviate the possibility of any hostile military preparations in that quarter. But an allied force must be placed and must remain in occupation of the Gallipoli Peninsula in order to safeguard the free and unimpeded entrance of the Straits. This also will be a demilitarized zone. The allied garrison will consist of a force sufficient to secure the entrance to the Dardanelles.

The navigation of the Straits will be placed, as already proposed, under the control of an international commission under a Turkish president, on which it is hoped as time passes that all the principal States who are interested in the commerce or navigation of the straits will be represented.

The demilitarized zone on the Asiatic shore of the Straits will be identical with the existing sanjak of Chanak. No further demilitarization is proposed on the southern shores of the Marmora, with the exception of the peninsula of Artaki. On the Asiatic shores of the Bosphorus the demilitarized zone will be identical with the existing neutral zone. The islands of Lemnos, Imbros, Tenedos, Samothrace, and Mitylene, outside the Dardanelles, and all the islands in the Marmora will equally be demilitarized.

Passing to the European shore of the Dardanelles and the Marmora the three ministers have been confronted with the difficult and anxious problem of the future of Eastern Thrace. On the one hand, they were unable, for the reasons which have already been stated, to accept a solution that would place the Gallipoli peninsula once more in the hands of Turkey. On the other hand, they were met by the complaint that some, at any rate, of the lines of frontier that have hitherto been proposed between the European possessions of Turkey, to the north and west of Constantinople, and the areas in Eastern Thrace in the occupation of the Greeks, afforded insufficient protection to the Turkish capital, which might find itself exposed in the future either to the military menace of invasion or to the invidious propinquity of a neighbor with whom it had recently been at war.

Such dangers, it was obvious, would be most effectively removed (*a*) by the removal to a sufficient distance from Constantinople of the projected frontier; (*b*) by the effective neutralization of the areas outside this line. Furthermore, the ministers were confronted by the incontestable facts of the existing situation. Whether the attribution of Eastern Thrace to the Greeks by the unratified treaty of Sevres be or not be held to constitute a valid title, the Greek forces are in effective occupation and the Greek Government is engaged in administering that area, which, moreover, contains and has long contained a considerable and in certain parts a preponderant Greek population.

In these circumstances the ministers were unable to assume the responsibility of requiring from Greece not merely the complete evacuation of Anatolia, to which it must be remembered in passing that Greece was invited in 1919 by the powers, but the complete evacuation of Eastern Thrace in addition.

Accordingly, bearing in mind the importance of the strategical considerations before referred to, which may be summed up in the desideratum of reasonable security for the capital and the State of Turkey in Europe, the foreign ministers of the powers invited the military authorities to assist them with their expert advice. These authorities recommended the drawing of a line which will run from the neighborhood of Ganos, on the Marmora, in a northerly and northeasterly direction to a point on the Bulgarian frontier in the western part of the Stranja mountains. This frontier will leave Rodosto, a Greek town, to the Turks. It will place Baba Eski and Kirk Kilisse on the Greek side of the Turco-Greek frontier. The safety of the frontier is assured by the topographical features of the country, and will be further confirmed by the demilitarization of almost the entire area of Eastern Thrace, both on the Greek and the Turkish sides of the frontier. Thus the Greeks will not be able

to threaten Constantinople, and the Turks will not be in a position to attack the Greeks.

The periodical inspection of these and the other demilitarized zones will be undertaken by allied officers attached to the allied force on the Gallipoli Peninsula, the area of whose occupation will be extended eastward to Rodosto.

It has been considered whether any special provision should be made for the town of Adrianople, which it has been found impossible to sever from the surrounding territories of Eastern Thrace. Smyrna, which will revert to Turkey, and Adrianople, which will be retained by the Greeks, are in a somewhat analogous position. The powers will be quite willing to enter into friendly communication with the Turkish and Greek Governments, with a view to the conclusion of a friendly agreement upon conditions which will guarantee a full and fair share to the non-Turkish and the non-Greek elements in the populations in the administration of the two cities and will further safeguard the religious buildings and institutions of Adrianople.

The three ministers are not so vain as to suppose that this solution of the Thracean problem will be warmly accepted by either party. The problem admits of no such easy solution. They can only commend it to the public opinion of the world as the proposition which seems to them to be most consistent alike with justice and with the facts of the case.

Passing to Constantinople the three Governments desire to confirm their previously expressed willingness to withdraw altogether the threat that was made at the time of the treaty of Sevres to revoke at some future date the retrocession of the capital to the Turks. They confirm the restoration of that city to the full authority of the Government of the Sultan; and they are further willing to engage that the allied forces, by whom it is at present occupied, shall be altogether withdrawn after the ratification of the future treaty of peace.

The Turkish Government will be invited to garrison the city with a larger force than was contemplated in the treaty of Sevres.

There remain the questions of the future armed force of the Turkish State, the financial independence which it will enjoy, and the suggested modification or surrender of the capitulatory rights which are enjoyed by foreigners.

Concerning the armed forces of Turkey, the allied powers are unable to depart from the principles which it has been found necessary to enforce in the treaties that have been concluded with all the other States recently at war, or to admit the continuance of the system of conscription. They will, however, be prepared to consider with the Turkish Government in an amicable spirit the determi-

nation of the period within which the voluntary system of recruiting must be established in that country.

As to the numerical strength of the Turkish forces, it is proposed to allow a very appreciable augmentation of the figures which were contained in the treaty of Sevres or were afterwards suggested in London in 1921. The forces now finally proposed-are: Gendarmerie 45,000, regular army 40,000, or a grand total of 85,000 men, a total which is very markedly in excess of the 50,000 designated in the treaty of Sevres.

Should the Turkish Government desire the assistance of foreign officers for the organization of the above-named force of gen-darmerie—a measure which will probably be found to conduce greatly to its efficiency—the powers will be ready to place them at the disposal of the Turkish Government.

With regard to finance. The financial clauses of the treaty of Sevres shall be modified in such a way as to abandon the proposed financial commission, while reconciling the principle of Turkish sovereignty with the protection of allied economic interests and with the amount of control necessary to insure the payment of Turkish pre-war debts to the Allies and a war indemnity fixed at a sum which Turkey can be reasonably expected to pay. The pre-war debt commission shall be maintained and a special allied liquidation commission shall be set up for the above purposes.

In respect of the existing capitulatory system, the three ministers are anxious to secure to Turkey the largest measure of economic independence consistent with the due protection of the interests of the nationals of their respective countries. For this purpose they are prepared to set up at Constantinople, within three months from the coming into force of the treaty of peace, a commission composed of representatives of Great Britain, France, Italy, and Japan, and of Turkey, to prepare, with the assistance of technical experts representing the other capitulatory powers, proposals for the revision of the capitulatory régime in fiscal matters.

These proposals shall provide for fiscal equality between foreign and Turkish subjects, while safeguarding the former against excessive taxation and abuses in collection, and for any necessary modification of the customs taxes, with the consent of the powers concerned.

As regards the capitulations in judical matters, the allied powers repeat their former offer to set up within the same period a similar commission to prepare a scheme of judicial reform to replace the capitulatory system, which will continue provisionally pending the introduction of the proposed scheme. This commission, on which Turkey will be represented, will be at liberty to recommend either a mixed or a unified judicial system.

Such, in broad outline, are the main features of the settlement which the ministers of the three great powers, acting on behalf of their Governments, have decided unanimously to recommend. These proposals are now submitted primarily to the judgment of the two parties who are directly involved, but secondarily, and in a not inferior degree, to that of the civilized world.

Nor is it necessary to add that the people or the government by whom they were deliberately rejected, if such a misfortune were to occur, would assume a very grave responsibility before the public opinion of mankind, namely, the responsibility of resuming a struggle which has already wrought sufficient havoc among the peoples of two continents, and the renewal of which can only bring further ruin and destruction in its train, besides leading to a permanent embitterment between the races and creeds of the Near East.

OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 8—1922.

15 AUGUST, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 8—1922—15 AUGUST 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

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ARGENTINE NAVY REGULATIONS.

15 May, 1922.

1. The systematic attack on the ministry of marine by the press is reaching the point of getting after the smaller matters. La Prensa states that it has recently looked over the one volumn of the United States Navy Regulations and the seven volumes of the Argentine Navy Regulations, and can readily understand the complaint of naval officers that the Navy is overregulated, and that the frequency of changes makes for utter confusion. La Prensa also states that the former method of announcing changes in regulations in the " Orders of the Day " has been abandoned by the ministry of marine in order to escape hostile comment from the press.

FOREIGN NAVAL MISSION FOR BRAZIL.

18 May, 1922.

(There is given below in full a translation of a leading article appearing in O Jornal of 6 May, 1922, on the subject of the naval mission. O Jornal is generally regarded as one of the best edited papers in Rio de Janeiro; it is widely read and its leading articles carry much weight. This article is extremely interesting as showing what the thinking part of the Brazilian people expects of the forthcoming foreign naval mission.)

The clause in the budget authorizing a contract for a foreign educational mission for the navy, which we hope will be approved by the senate, defines its character in the same terms as those which authorized a mission for the army.

Without going into details, it establishes the essential points which will prevail. The mission will have a chief; however, it will act as a whole, with but one purpose. Without a chief it would not be truly a mission, being only a certain number of instructors, each one acting by himself.

The chief of the mission will be attached to the general staff in the position of technical assistant. His functions, however, will not be that of command, but of high adviser to our principal naval authority.

The chief of the general staff of the navy with us is not only the chief of the military department that organizes and conducts war, he is also, in fact, at least for the present, more or less the military director of the navy with direct jurisdiction over all its combatant forces and over some of the preparatory or training bodies. By the

nature of his duties, by his relations to the minister, he must be the principal source of knowledge of what the necessities of the navy are and the prime support to the efforts of the mission.

The position of the chief of the mission, attached to the general staff, shows that the nature of the services that are required of him are well understood. These services consist in establishing in the navy a Brazilian organization which will make the navy a war weapon; in implanting the spirit of this organization in all the officers; in creating in them the ways of feeling, of thought, the knowledge of the modes of action which will make them bear fruit.

Thence will flow the development and organization of material afloat and resources ashore, without which the navy can not live; the proper direction of naval instruction; the organizing and selecting of personnel; the drills and activities—the strength of the navy.

This most important work of indoctrination will fall to the officers who compose the mission and will be carried on either in the naval schools, war college, and professional schools, either by lectures or by advisers attached to the commanders of forces who will then, it is to be expected, have an organization different from the present one or as the chief (of the mission) finds convenient.

We do not believe, as do many of those who occupy themselves with our military problem, that the naval mission is to be charged, above all, with technical instruction referring directly to material. We have a large proportion of personnel quite well equipped in elementary technical matters. One can not but admire the preservation and good working condition of the battery, torpedoes, engines, radio, and other installations of our ships, old as they are, but which still resist the action of time whenever the necessary means of upkeep have been provided. The utilization of this material under the same circumstances shows the intelligence with which the personnel understands the material. We have had gun practice, torpedo practice, submarine practice, moderate aviation exercises; always elementary, always without any progress beyond the first results obtained, always without guidance by an organization capable of transforming into one naval weapon that material which has been used as individual units, or even the various departments of the Navy acting solely for themselves. Thus, for example, our navy has never carried out a strategic exercise, nor has it even held a tactical exercise worthy of the name, nor does there even exist for such purpose the most immediate means of application, such as tactical signal codes, devices for careful cruising in squadron, and tables of tactical data.

Although we have had for some years a school of advanced studies, where there is taught strategy, tactics, and organization, everything,

according to the spirit of the regulations, in the light of the teachings of history, yet there has never been established in our navy a proper process of transformation of a subaltern officer to a commanding officer, which is, generally speaking, a passage from duties relating to the material on board to those which refer to the ship as a whole, from specialization to generalization; from execution to organization, and what constitutes for that purpose a veritable transformation of mentality.

This is the most important service which the navy will expect of the mission, and, beyond this, the cultivation of certain products which we do not have in our country to such high degree as they should exist, such as the spirit of placing the interests of the country above personal interest; rigor in fulfilling little annoying duties and demanding their fulfillment by others; the little sacrifices to the coordination demanded by regulations, to the formalities whose observance helps create obedience and self-denial; method of working; a consciousness of the objects to be obtained.

The authorization referred to does not fix the number of officers who will compose the mission. It is impossible beforehand to foresee either the number of officers or the organization which the mission will have. We believe that the officer who is chosen for the high duty of chief of the naval mission will begin only with his clerical force before entering upon his duties, so as to study the problem committed to his charge and decide upon means and methods of action.

It is not yet known from what country the naval mission will come. Opinions and prejudices among our naval officer body are divided between England, the United States, and the choice of whatever may be considered best from each of the two nations.

England has behind her an incomparable naval history, an epic of wars on the seas, a prestige as queen of the oceans, a maritime consciousness, a marvelous shipbuilding industry; the United States have more method, a better scientific basis in their naval methods. Choice between the two is difficult.

It is thus possible that, given the high degree of perfection of the two navies, sprung from the same race, the decision will be governed by considerations of international policy. Then we shall probably have in this choice one more manifestation of continental solidarity.

As to us, desirous of the military and naval progress of our country, we shall consider an American mission as good for that purpose as an English one.

We desire it as the only means of making the navy what we want it—something which lone experience has shown we can not do for ourselves.

BRITISH STATEMENT REGARDING FOREIGN AIRCRAFT.

23 June, 1922.

On June 20, 1922, in response to a question by Major General Seely, M. P., Captain Guest, the Secretary of State for Air, made the following statement regarding the civil aircraft strength of France, Belgium, and Holland:

The numbers of civil aircraft borne on the French, Belgian, and Dutch registers on May 1, 1922, were 398, 39, and 15, respectively. In the absence of any authoritative statement by the Governments concerned, it is impossible to say what portion of these airplanes would be of value for fighting or war-training purposes, but it is probable that the number for modern warfare would be small. As regards Germany, 225 airplanes were, on May 1, available for air traffic, but none of these would be of value for war purposes. As regards America, the estimated number of civil aircraft in operation in 1921 was 1,200. Of these, approximately 600 were employed by civil air transport companies.

The above parliamentary evidence is concurrent with an elaborate press propaganda particularly carried on by the Northcliffe papers for a stronger support for the civil air services. In promoting their propaganda, the papers and authors of the various articles do not hesitate to use the jinks of the probability of another European war and continually cite the growth of French commercial aviation and the possibilities offered by such growth in the event of a war, even going to the extent of saying that London would be completely wrecked in 24 hours. In Captain Guest's statement above, where he says that the number fit for modern warfare would be small, he, of course, means that the planes being primarily designed for commercial use would not have the high performance of strictly military planes, but the advocates of air strength in Great Britain know that these planes while lacking performance that would justify their being sent to a battle area, point out that they are quite capable of carrying several hundred pounds of bombs a sufficient radius to come from the European channel ports to London and the industrial district of the Midlands and return.

Most of the commercial French planes are using—in fact, all of those on the London-Paris route and the Paris-Strassburg-Prague route—are still using motors left from the war. The Salmson 9-cylinder water-cooled radios have about 220 horsepower.

BRITISH AIR FORCE.

24 June, 1922.

Statement of the Secretary of State for Air Regarding Air Strength Available for National Defense.

In reply to the question in the House of Commons about the 12th of June, 1922, the Secretary of State for Air, in answer to the ques-

tion, "What is the total number of airplanes available for national defense in Great Britain in case of emergency?" made the following statement:

On February 24 there were approximately 773 airplanes in active use in the Royal Air Force throughout the world, and the total number of airplanes in the establishment of the Royal Air Force is 1,938. I do not consider it advisable in the public interest to state the number of airplanes for national defense in case of an emergency.

BRITISH CROSS-CHANNEL AIR ROUTE.

24 June, 1922.

The Supermarine Aviation Co., of Southampton, are behind a scheme for establishing a cross-channel route for passengers and freight. The air ministry has approved of the formation and operation of this company under the general subsidy terms.

The object of the service will be principally freight, especially perishable fruits and vegetables, between the channel islands owned by Great Britain and Southampton and the London market. It is claimed this will put the farmers' products in London 24 hours earlier than the present transportation arrangements, and will more than justify the additional freight rate in the reduction of wastage due to the present delays. Due to certain conditions which necessarily obtain in this field now, such as the necessity for picking strawberries at a certain time of day and crating them carefully, it takes about 48 hours for the produce to be offered in the London markets from the islands of Guernsey and Jersey.

In the passenger service which this company also hopes to make commercially advantageous, the object will be principally to shorten the trans-Atlantic journey by picking up passengers at Cherbourg and Havre, flying them to Southampton, thus putting them in London about 12 hours earlier than the present steamer arrangements; also in the reverse direction, allowing passengers 12 hours longer in London and then conveying them to Cherbourg to catch the New York steamers. The London & South Western Railway is actively cooperating with this scheme.

It is reported that the charges will be £1 10s. per passenger and 1½d. per pound freight.

The French Government has been approached for the provision of the necessary customs facilities at their ports, and the French railways have agreed to assist in providing and arranging train services between Paris and the ports.

BRITISH TROOP-CARRYING AIRPLANE.

8 June, 1922.

Messrs. Vickers (Ltd.) have designed and are building for the air ministry two specimens of a troop-carrying airplane known as the Vickers *Virginia*. Details of this machine are not known beyond certain statements to the effect that seating capacity is provided for 23 men, together with a normal infantry equipment amounting to about 70 pounds per man or the equivalent weight in machine-gun units. It is not believed that the plane itself is designed to carry machine guns, but it is arranged in such a manner that if a machine-gun unit is being carried they may use the machine guns from the air with a reasonable degree of effectiveness. The machine is stated to have a radius of about seven hours at about 90 to 100 miles an hour, a ceiling of about 18,000 feet, and is powered with two Napier Lion engines.

BRITISH LONG-DISTANCE BOMBING AIRPLANE.

8 June, 1922.

Messrs. Vickers (Ltd.) have designed and are building for the air ministry two specimens of a long-range bomber. Accurate details of this machine are not known. It will be known as the Vickers *Victoria*, and is stated to have a radius of 10 hours at 90 to 100 miles an hour, a ceiling of about 18,000 feet, and will carry two gunners, a pilot, a mechanician, and radio operator. The fittings for the bombs are arranged in four rows of three bombs each, and the bombs carried will be about 100 to 125 pounds size. The bomb racks are fitted in a tunnel directly underneath the center of gravity, so that the profile will be normal in appearance. The rear end of the tunnel is stream lined into the bottom of the fuselage.

The power plant of this machine will consist of two Napier Lion engines, and the wing loading at full load is said to be about $7\frac{1}{2}$ pounds.

"BRENNEN" HELICOPTER.

9 June, 1922.

There has recently appeared in the British press some startling statements as to the tests of the "Brennen" helicopter, which has been built at the Royal Aircraft establishment at South Farnborough under great secrecy. This helicopter was built to the designs of Mr. Louis Brennen, workmanship, labor, and money being supplied by the air ministry. The papers stated that this machine had complied fully with all air ministry tests and, notably, had risen vertically to a height of 2,000 feet in a 20-mile wind, and with motors cut off had

landed in the same spot; also that it had shown a horizontal speed of at least 60 miles an hour.

The source or origin of this report is not known, as this office has been officially informed by the air ministry that the machine is completely disassembled and has not been tested recently, nor do they anticipate testing it soon.

One of the former reports on this machine was recently learned to have been the result of a practical joke carried out by two pilots on a newspaper reporter who was found sneaking around the inclosure attempting to get information. The pilots managed to keep this reporter up two nights, promising to let him witness a flight, and finally informed him that he had missed the flight, but they gave him a lurid description of it.

BRITISH AIR FORCES IN SOUTH AFRICA.

11 May, 1922.

The following information is available on the South African Air Force:

Soon after the armistice the Royal Air Force presented to the South African Government equipment to start an air force. This equipment consisted of 100 airplanes, together with spares to maintain them for one year. The airplanes were equipped with engines, and spare engines were furnished. The gift included also transport vehicles, motor workshops, 3-ton trucks, motor cars, motor cycles, and trailers; steel framework for 20 permanent hangars, 30 complete Bessoneau hangars, wireless equipment for two squadrons of airplane of 18 machines each, photographic material for two squadrons, 50,000 gallons of engine oil, 20,000 gallons of paints, varnishes, and dopes, complete tool equipment, and sufficient workshop machinery to establish an aircraft base depot. The shipment of this material was delayed somewhat, but it has been in South Africa for about a year. At first, due to lack of organization, very little was done, but during the recent severe strike troubles that were experienced in South Africa the desirability of an air force under the Government was realized, and more activity is now being put forward.

The organization consists of the following:

1. Headquarters, which includes staff, clerical section, photographic section, armament section, wireless section, and balloon section.

2. Aircraft depot, located at Zwartkop Aerodrome, Roberts Heights, Pretoria. This depot has a staff, a permanent guard, complete engine and airplane repair shops, airplane and balloon stores, and usual clerical force.

3. No. 1 squadron, consisting of 1 headquarters flight and 3 air flights of 6 planes each. The planes used are the D. H.–9, D. H.–4, Avro 504K and S. E. 5. These flights are not in full service condition to date, but are in skeleton form.

The personnel of the South African Air Force consists at present of 35 officers and 300 men, and the present objective as regards personnel is stated to be 48 officers and 450 men, all carefully selected, by March, 1923.

BRITISH COMPULSORY RETIREMENT.

25 May, 1922.

The recent order in council concerning compulsory retirement on the grounds of incapacity or peculiarity of temper is highly unpopular in the British service, and is a subject of considerable editorial comment in the daily newspapers and service periodicals.

There is a decided aversion to this order on the part of the royal navy in general; it is regarded as a measure prejudicial to the best interests of the service. It is stated that it confers upon the Admiralty despotic powers, which are only too likely to be abused. Rear Admiral Adair has suggested in Parliament that the order be modified to permit officers who are dealt with under the order to be heard personally in their defense and to see the reports of their commanding officers concerning them. It has been stated by several papers that this is a very fair suggestion, but a concession which they are not very hopeful will be granted.

BRITISH ATLANTIC FLEET SCHEDULE.

27 June, 1922.

Reductions and changes in the enlisted personnel of the British Atlantic Fleet are now being effected. For this reason the summer program of the Atlantic Fleet has been postponed until further orders.

ADMISSION TO ROYAL AIR FORCE CADET COLLEGE.

1 June, 1922.

The Royal Air Force authorities set out as the object of existence of the Royal Air Force Cadet College at Cranwell the special education of cadets for commissions in the Royal Air Force. The general conditions for admission to this college require that the candidate be unmarried, must have attained the age of 17½ years and not the age of 19 years, and must be considered by the air council suitable to hold a commission.

Admission to the college is granted to: (A) Successful competitors in the Royal Air Force entrance examination: (B) King's

cadets and honorary King's cadets; (C) candidates specially nominated by the air council.

Method of admission (A)—Successful competitors in the Royal Air Force entrance examination.

Details regarding (A) above show that the examinations are held twice annually, commencing on the fourth Tuesday in June and the third Tuesday in November. Due notice is given. Candidates may apply for application form to the secretary of the civil service commission. This form must be filled up in the candidate's own handwriting and returned to the secretary immediately. Forms are available about three months before the examinations, and dates after which they may not be acceptable to the civil service commissioners, are announced. No question of delay or loss is entertained. On this same examination a candidate may elect to compete for other national colleges and must put down his preferences in order. A candidate is required to satisfy the civil service commissioners that he is within the prescribed limits of age and is eligible in respect of character. He must be prepared to furnish an extract from a register of birth or other documentary evidence.

The subjects for examination, and the maximum number of marks obtainable for such subjects, are as follows:

	Marks.
Class 1, obligatory:	
1. English	2,000
2. English history and geography	2,000
3. Elementary mathematics	2,000
4. One of the following modern languages: French, German, Spanish, Russian, Italian, Arabic, Hindustani	2,000
Class 2, optional:	
1. Latin	2,000
2. Greek	2,000
3. One of the seven languages mentioned under class 1 (4) other than that taken under class 1	2,000
4. Intermediate mathematics	2,000
5. Higher mathematics	2,000
6. General science or physics and chemistry	2,000

To qualify in the examination candidates are required to obtain an aggregate of marks such as to satisfy the civil service commissioners. This qualification does not exempt the candidate from the necessity of qualifying for competitive purposes on subsequent entrance examinations. If the candidate takes two modern languages of the above, that in which he obtains the higher mark will be reckoned as his obligatory language.

In addition to the above subjects, free-hand drawing may be taken up with an additional 400 marks allowance.

Candidates will be entitled to additional marks on fulfilling one of the following conditions:

(*a*) Who qualify for certificate A in either the senior or junior division of the Officers' Training Corps; a secondary school or a recognized territorial force cadet unit will be eligible for the award of the actual marks obtained at the certificate examination, i. e., from 300 to 600.

(*b*) Candidates who were serving on January 1, 1920, or prior to that date, as officers, warrant officers, noncommissioned officers, or men of the Royal Navy, Royal Marines, Royal Air Force, Regular Army, Special Reserve, Indian Army Reserve of Officers, Militia, Territorial Force, or Forces of the Overseas Dominions who have completed four months' continuous service and can furnish a certificate to that effect will be entitled to an award of 400 marks.

(*c*) Candidates who were serving on March 1, 1919, or prior to that date, in the senior division of the Officers' Training Corps, and can furnish certificate to that effect, will be entitled to an award of 400 marks.

Candidates will not be awarded the 400 marks for service in addition to the marks gained in certificate A examination. The marks gained by each candidate are added up and, provided he qualifies under the entrance examinations above, the resulting total will determine his place in the competitive list.

Method of admission (B)—King's cadets and honorary King's cadets.

King's cadets.—King's cadets are appointed by the Secretary of State for Air from sons of officers of the Royal Air Force, Army, Royal Navy, Royal Marines, and permanent Military Forces of the Overseas Dominions, or irregular troops when acting with, or in support of, the regular forces in the field, who have fallen in action or have died of wounds received in action, or of disease contracted on service abroad, and who have left their families in reduced circumstances. King's cadets are not required to pay the annual educational fee.

Honorary King's cadets.—A limited number of honorary King's cadets may be nominated annually by the Secretary of State for Air, and are appointed from—

(*a*) Sons of officers of the Royal Air Force, Regular Army, Royal Navy, or Royal Marines, who were killed in action or have died of wounds received in action within six months of receiving such wounds, or from illness brought on by fatigue, privation, or exposure incident to active operations in the field before an enemy, within six months of their having been certified to be ill.

(*b*) The sons of officers of the Royal Air Force, Regular Army, Royal Navy, or Royal Marines, who have obtained the rank of squadron leader in the Royal Air Force, or relative rank in other services, and have performed long and distinguished service.

An honorary King's cadetship will not carry with it any pecuniary advantages as in the case of the King's cadet.

Method of admission (C)—Candidates specially nominated by the air council.

A very limited number of cadetships at the Royal Air Force College will occasionally be filled by suitable candidates specially nominated by the air council. The Secretary of State for Air receives recommendations for this nomination from the headmaster of the candidate's school. Certain schools in the British Empire are approved for this purpose and recommendations are for one college only. To be eligible for nomination by the air council a candidate must fulfill the general conditions laid down above and, further, must—

(*a*) Be recommended by the headmaster of his school.

(*b*) Have attended continuously at least three school years at one or more approved schools.

(*c*) Have been in residence at his school to the end of the school term immediately preceding his nomination.

(*d*) To be within the age limits of 17½ to 19 years.

(*e*) Be an " efficient " member of the school contingent of the Officers' Training Corps.

A limited number of appointments may, in special circumstances, be granted to candidates up to the age of 21 years who have been prevented by service from complying fully with the conditions laid down next above.

In addition to the above a limited number of cadetships will be fulfilled by candidates recommended to the air council by the Secretary of State for the Colonies, the governors general of Canada, Australia, New Zealand, South Africa, and Newfoundland, and in these cases special arrangements will be made for examination in the colonies.

Terms of Payment.—Cadets are required to pay annual fees amounting, except in the case of King's cadets, who are exempt from all payment, to from £20 to £75 a year, and payments should be made half yearly in advance.

The Royal Air Force Cadet College is commanded by an air commodore, styled commandant, who reports to the Secretary of the Air Ministry on all matters concerning the college. The organization of the college is based upon that of a Royal Air Force group, one wing consisting of the cadets and their instructors and the other of the Royal Air Force unit required for the flying instruction. The cadets' wing is divided into four squadrons, each of two flights. Each flight contains a proportion of cadets from each term. Senior cadets are chosen for noncommissioned ranks. Squadron leaders

and flight lieutenants are selected from amongst the officer instructors.

All cadets are required to appear in uniform at all times, except when on leave or when otherwise exempted by the commandant, and are in general required to observe all military rules and customs.

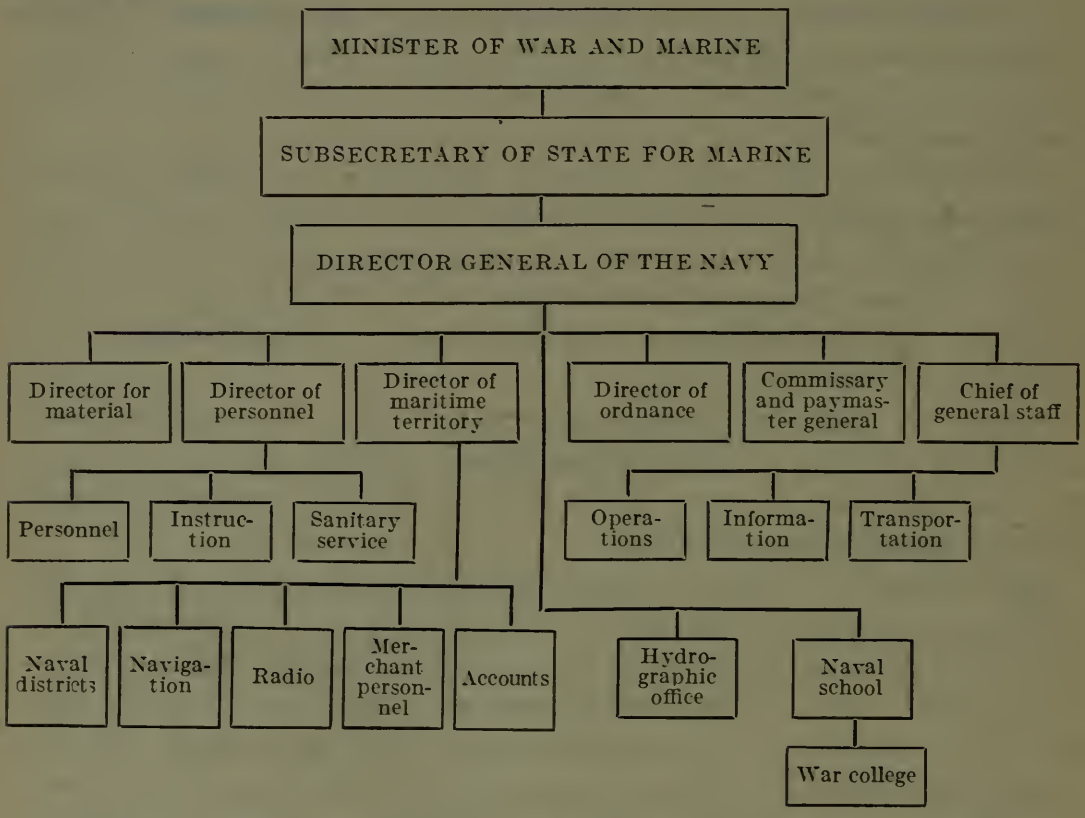
Course of instruction.—The normal length of the course of instruction is two years, each year divided into two terms (this may be changed to suit special requirements of the service). Examinations are held periodically, and the aggregate of the examination mark and the term mark determine the cadet's place in order of merit for passing out for appointment to a commission. A cadet failing to qualify in an examination drops a term, and is warned that if he fails in the next examination, he is liable to removal from the college.

After completing the two years' course at the college the cadets pass out to service commissioned as pilot officers.

CHILEAN NAVY.

10 May, 1922.

In diagrammatic form, the organization of the Chilean Navy is as follows:



The Chilean Navy has a civilian secretary known as the "Ministro de Guerra y Marina," or Minister of War and Navy.

Under the parliamentary form of government in Chile he is responsible not only directly to the President but to the Congress. He has two civilian subsecretaries under him, one for the army and the other for the navy. The parliamentary system and the characteristics of the people are such that the ministers frequently change, the result being that the ministers lose touch with their departments, and the Minister of the Navy interferes very little with the internal administration of the navy. The subsecretaries of state are more permanent and are therefore more familiar with their departments.

The actual head of the navy is the director general who makes his headquarters in Valparaiso.

The director general of the navy signs all orders and controls the general policy of the navy. The general policy of the navy is supposed to be governed by a national council, which is composed of the director general, the director for material, the director of personnel, the director of maritime territory, the director of ordnance and fortifications, the commissary and paymaster general, and the chief of the general staff.

The commissary or paymaster general is a civilian.

The council acts upon all matters which the director general may assign it, such as estimates of budgets, examinations, and award of bids for material, promotion of officers, etc.

The director of material has duties which would correspond to the combined duties of our Department of Engineering and Naval Construction.

The director of personnel has charge of the personnel bureau, which corresponds to our Bureau of Navigation. His department has three subdivisions: (1) Personnel, (2) instruction, and (3) sanitary service. Under "Instruction," he has charge of all schools except the war college and naval school. The sanitary service, which is under his direction, would correspond to our Department of Medicine and Surgery.

The director of maritime territory supervises the administration and policing of harbors and has general control over maritime affairs in Chile. Under him are the lighthouses and coast patrol and he is responsible for all the aids to navigation in the harbors and on the coast of Chile.

All the naval districts are also directly under his jurisdiction, and he also has charge and general control over the merchant marine and issues pilot licenses, examines and gives certificates to officers of the merchant marine, and enforces shipping articles, etc. He also has charge of all the radio stations in Chile and therefore issues coast and weather reports, etc.

The department of maritime territory is divided into five subheads: (1) Naval districts, (2) navigation, (3) radio, (4) merchant personnel, (5) accounts.

The director of ordnance and fortifications is a rear admiral. He has charge of all naval ordnance and coast fortifications. In Chile the coast artillery is under the navy, but with few exceptions, the senior officers at each fort and the enlisted personnel are men from the army, detailed for a definite period, usually two years.

The commissary and paymaster general has charge of the department which would correspond to our Bureau of Supplies and Accounts. The head of this department is a civilian.

The chief of the general staff of the navy is an admiral, and the duties and jurisdiction of his department are as follows:

To do all work relating to the preparation of the navy for war.

The knowledge of foreign navies, especially of the American nations, and the study of the advances made in arms and naval elements in modern wars.

To study the organization of the navy for war, in regard to material and personnel, and to communicate to the director general the improvements that they deduce from these studies.

To confer with the naval council in regard to the military part of the program of new construction, in regard to alterations or reforms that affect the military value of the existing units, and in the location of naval bases, temporary or permanent, including details on resources and defense.

To study the best form of utilizing in war the ships of the national mercantile marine, proposing the regulations that should govern its construction in order that it might better conform with said purpose.

To prepare the plans, in agreement with the army, for the commandeering and censoring, in time of war, of the different mediums of communication of the country.

To prepare the plans for the periodical maneuvers of the fleet and the annual programs for the instruction of the squadrons, divisions, and flotillas of destroyers and submarines, specifying the zones in which they should carry out said programs.

To prepare and to maintain up to date, after approval by the naval council, the plans of mobilization, campaign, and operations, sending to each one of the sections of the navy the instructions concerning it, in order that it may put them in practice when so ordered.

To submit to the director general a fundamental plan for a naval program, indicating the types of ships, their armament, and protection.

To organize and direct the secret service and to arrange the confidential missions, for which it will have at its disposal the money which is provided for in the annual budget for this purpose.

To prepare, revise, and correct the books on tactics, signal codes, and keys.

To prepare the plans for the commandeering of national industries pertaining to the necessities of the navy in time of war, and for the requisition of naval stores, etc.

To maintain up to date a complete study of the best method of distribution of the national production of coal in time of war, in a form that would satisfy the necessities of the navy, without effecting the railroad service and other necessities of the country, industrial as well as domestic.

To keep statistics of the different fuels, lubricating substances, and the most important naval requisites of private ownership that exist in the country, and data on the reproductive capacity of the establishments that produce or elaborate elements necessary for the naval service.

To have under its jurisdiction and direction the naval attachés and officers who perform service in foreign navies.

To have under its charge the printing office of the navy and the publication of the Revista de Marina.

To have under its charge the instruction of officers of the general staff and those on probation and to submit to the director general the names of those that should occupy posts for which they are specially fitted.

Besides the work already enumerated, the general staff should inform the director general on whatever other subject that may be committed to it, especially those that contribute to greater efficiency of the navy in general, as, for example, the regulations, circulars, and other orders concerning the service.

For carrying out the different duties which the former article indicates, the chief of the general staff is empowered—

To request when deemed desirable the assistance of any specialist, trying if possible to always obtain the same ones, in order to have a guaranty of secrecy.

To request directly, from whatever department or section of the navy, the data and information that is not embraced in that which, by order of the director general, it should receive regularly.

To be present as observer, when it seems desirable, at the maneuvers of the squadrons, divisions, or flotillas, and the exercises of any of the schools.

CHANG TSO-LIN'S HIGH-HANDED METHOD WITH PEKING GOVERNMENT OFFICIAL.

19 April, 1922.

A few days ago the Tartar general of Chahar, Chang Ching-hui, who is now in Peking with a small detachment of his own troops

and supposedly very pro-Chang Tso-lin, received a letter from the latter instructing him to proceed with 10 armed army officers to the yamen of the new acting premier, Chow Tso-chi. He was instructed to gain admission to Chow's office and to demand $7,000,000 or else threaten to shoot the acting premier on the spot.

Gen. Chang Ching-hui, instead of carrying out instructions, proceeded to Chow's yamen and personally delivered to him the letter in question. Over several cups of tea they discussed the situation most amicably and eventually relegated Chang's document to the waste-paper basket.

This incident is of interest in that it shows what a high-handed and unscrupulous man Chang Tso-lin really is, and one whom a few deluded foreigners living in Manchuria portray as a Chinese patriot. This action on Chang's part might interest those Americans who happen to read Isaac Marcosson's article on Chang Tso-lin about to be published in the Saturday Evening Post.

Marcosson, upon his arrival in China, fell in the hands of Chang Tso-lin's propagandists, and his statements made in conversation show that he considers Chang Tso-lin a wonderful and strong man whom destiny has selected to reunify China.

THE LATE CIVIL WAR IN CHINA.

Source: Reliable. **1 June, 1922.**

General Wu is considered a man of very high attainments and one who may bring about the unification of China, provided, however, that the Japanese do not promote intrigues and turmoil.

Wu has stated on more than one occasion that his mission in life was to create a Chinese national army which would drive the Japanese off the Asiatic mainland.

Wu is very bitter against the Japanese and the latter will do everything in their power to promote his downfall. Wu is very pro-American, and with him in power Americans can rightly feel that all their interests will be well protected.

General.

Chang Tso-lin came into Chihli Province and took up a position between the Tsin-Pu and Kin-Han Railways for the political purpose of holding a reunification conference from which Wu Pei-fu was to be excluded from other than a nominal participation. Chang's army had no orders to attack Wu. Its mission was to prevent Wu from dominating Peking and Tientsin during the conference.

Wu, by minor military operations, which included the cutting of the Tsin-Pu near Machang, caused Chang to take up the position

Machang, Pachow, Liuliho, along which position his army dug in. Wu then, practically without molestation, made his own disposition of troops to suit his own purposes, which was to drive Chang out of Chihli. Knowing that Chang did not intend to attack him, Wu placed his second-rate troops against Chang's best at Machang and attacked Chang's right flank. The attack was a success, Chang claiming, however, that its success was due to the defalcation of the Sixteenth Fengtien Division, which Chang says surrendered without fighting. Chang was also concerned by the presence of the First, Ninth, and Thirteenth Divisions, stationed in and about Peking. These three divisions were supposedly neutral.

Chang's right having been turned, a general retreat started, the railways being utilized to their capacity, and large numbers of troops moving by road. The Fengtien troops in the vicinity of Machang did not retreat until ordered to do so. The retreat, as a whole, was orderly, although the greater part of Chang's artillery and supplies were lost.

Wu, with his Fourth Mixed Brigade, arrived in Tientsin half an hour after the departure of the last Fengtien train. He immediately ordered this brigade to proceed to Chunliangcheng, at which place they captured approximately 7,000 prisoners. Wu remained in Tientsin three days, organizing his forces for a further advance; he then turned over the command of the Chihli forces to Gen. Wang Chenping, the commanding general of the Twenty-third Division, and himself returned to Paoting to attend a conference re the Honan situation. It was at this time that a presidential mandate was issued declaring, among other things, that Chang was an enemy of the Chinese Government. Such being the case, the First, Ninth, and Thirteenth Divisions immediately joined Wang's forces.

Wang, on receiving command of the army, immediately started his advanced guard, the Fourteenth Mixed Brigade, toward Shanhaikwan, via the Peking-Mukden Railway.

Chang, meantime, halted in the Kaiping, Kuyeh, Luanchow area, and started the reorganization of his forces, bringing reinforcements from Mukden. He constructed modern trenches, perpendicular to the railway, extending more than 20 li on both sides of the railway, and manned them heavily with machine guns and what was left of his artillery, putting cavalry on both flanks. Before Wang caught up with him Chang had approximately 70,000 troops in position. The Kailan mines, producing 14,000 tons of coal a day, are located in the area referred to.

Wang's advance guard on reaching Sukochwang learned of Chang's disposition and halted. Tongshan, then garrisoned by 100 American troops, was between the two forces, but free from

both. It was at this time that the foreigners of Tongshan attempted mediation, without success.

Wang immediately reinforced the Fourteenth Brigade with the Twenty-fourth Division. He then brought up the Twenty-third and units from the Ninth, Eleventh, and Thirteenth Divisions to Tangfang and Lutai where they detrained and marched north overland to get in position on Chang's right flank. By the time two brigades reached Fengrun, Chang had decided to withdraw; first, because his position was threatened by Wang's flanking movement, and second, because he had just learned that the southern expedition could go no further, and that the Chao brothers in Central China had been suppressed. He therefore started his movement towards the Great Wall, the object of his stand being to encourage his allies in southern and central China. There was no fighting in the Luanchow area, except for the activities of Chang's bombing planes, which did little damage.

Organization.

The China Yearbook, 1919, gives the organization which was generally used in this war, with the exception that the division numbers 10,000 and not 20,000. The mixed brigade is often reinforced until it is larger than division strength, this being done to give a capable brigadier a force larger than his rank rates. I saw no evidence of army or army corps headquarters.

Discipline.

The discipline, particularly of the Shensi troops, was remarkably fine. There was very little looting, offenders being immediately shot. Troops remained steady under shellfire and on the approach of bombing planes. Detraining and entraining is done rapidly and quietly. A light battery of the Eleventh Division detrained at Tangfang, were served a hot meal, harnessed, and were on the march in an hour. The only evidences of panic were caused by very young boys, which every organization seems to have. Their presence was explained to me by a staff officer, who informed me that it was customary for nearly all organizations to pad the pay roll heavily. When ordered into active service it was necessary to turn out the number of men for which the disbursing officer had been drawing pay, and the boys were the only ones who could be persuaded to enlist at such a time.

Equipment.

Weapons of many different makes were observed. The greater part of the rifles, bayonets, and mountain artillery seen were the products of Chinese arsenals. Automatic pistols and fieldpieces were mostly of German make.

The individual soldier's load was very light. Rifle, bayonet, two cotton bandoliers, a small roll containing an extra pair of shoes and a day's ration and personal effects, a cup and a pair of chop sticks in lieu of mess kit, and, generally, a slicker or umbrella. Tentage is carried by battalion transportation, one tent housing 14 men. Apparently the only transportation is the two-wheeled cart, generally drawn by one horse. These carts make 25 miles a day without difficulty and carry a load of half a ton or more.

Communication.

I saw no field telephones or wireless sets. The telegraph lines of the railways were used a great deal. All other communication seemed to be by runners, dismounted and mounted.

Miscellaneous.

Nearly every officer and soldier of the great number with whom I conversed mentioned his personal hatred of the Japanese and how much he regretted that they were not his enemy instead of the other faction. One of the reasons for Wu's success was because his troops thought that in fighting Chang they were at the Japanese. I was informed by Mr. Baker, Chang's foreign adviser, that Chang had Japanese officers on his staff. Large quantities of Chang's supplies had Japanese marks on it. Chang informed his forces, and they largely believed it, that in fighting Wu they were putting down a military despot who was ruining China; therefore both sides believed that they were fighting from patriotic motives.

A large proportion of the Chinese officers can read and make use of maps, and the artillery, at least of the Eleventh Division, were well equipped in that respect.

The marksmanship of the average Chinese soldier was very poor. Although Wu's men had had plenty of sighting and aiming drill, trigger squeeze, etc., the amount of target practice they had was negligible. It has been estimated that the total of killed and wounded on both sides totals well over 10,000, which is rather remarkable, considering the shortness of the campaign and the indiscriminate shooting.

There were approximately 100,000 men, all told, who participated in actual combat.

CONDITIONS IN ASIA.

18 April, 1922.

A close analysis of the Far Eastern situation leads one to believe that many of those who are studying past and present events in the Orient are so careful to keep in touch with all the detailed happenings that they neglect the main issues entirely.

The quarrel between Chang, of Manchuria; Sun, of Canton; and Wu, of Loyang; the encouragement and formentation of banditry in Shantung Province by the Japanese; the return of Shantung to China; the much-agitated question of the abolition of extraterritoriality; and many other incidents and issues pertaining to China proper are of small significance as compared to what is occurring and happening in Mongolia, Manchuria, Korea, and Siberia.

A glance at the map reveals the fact that the area of Asiatic mainland, India excluded, comprises about 6,000,000 square miles, 3,000,000 of which is included in the territories of Manchuria, Mongolia, Korea, and the Chita Republic. The activities of the Bolshevik and Japanese in this region, which comprises one-half of the area of the Asiatic mainland, is the vital issue and the stumbling-block to peace in Asia.

It is generally understood that the Washington conference was called for the purpose of avoiding the portentous inevitableness of an American-Japanese conflict which the unstable condition of Asia was gradually developing.

The conference has certainly created a much better feeling between America and Dai Nippon, and has greatly tended to decrease the possibility of a conflict between these nations in the near future, but just as much as the Japanese oppression of the Chinese was a menace to the peace of the Far East so to-day the Japanese policy in Siberia and the spread of sovietic principles in Mongolia and Korea is the underlying barrier to peace in Asia.

It is not intended to minimize the seriousness of the situation in China proper but to emphasize the great importance of keeping in touch with the conditions in the northern part of Asia outside the wall.

The strange part, however, is how little accurate information we have on conditions in this northern region.

Mongolia is to-day governed by soviet officials. Each department of the Mongolian government, although nominally administered by a Mongolian official, is completely controlled by a Bolshevik adviser; besides there exists a so-called advisory committee composed of 72 members who are young Mongols and Buriats educated in Siberia. This committee has extensive powers and completely overrules any action on the part of the Living Buddha or any Mongol members of the cabinet to rid themselves of Bolshevik influence. There are stationed in Urga 4,500 soviet troops from Moscow.

In Manchuria we still have the Japanese importing morphia and selling arms and munitions to the bandits, while the situation in Siberia is so intricate that even those foreigners living in Vladivostok can not obtain a clear conception of what is going on between the Japanese and nationals of the Chita government.

Korea is in its usual state of turmoil with an independence movement being financed by the soviet and the Japanese trying to prevent a restoration of the monarchy.

FRENCH NAVAL AVIATION.

11 May, 1922.

(*a*) *Rising from the deck.*—At the end of the war, when the daily increasing imperfections of the seaplanes rendered their services of less value, Lieutenant Teste attempted to rise from a platform installed on one of the turrets of a battleship. A terrible fall upon the bow of the ship was the result of this experiment, which had been imposed and not well prepared. But the process has since been carefully studied and perfected. We have not as yet any aircraft carriers, but a platform 15 meters long and 6 meters wide has been installed on board the cruiser *Bapaume;* pilots are being trained to take their flight on sea from this platform. When on the platform the plane is maintained tail upward, and is only set free when the motor has reached its normal speed. Naturally, these risings of the airplane only take place when the vessel is proceeding at full speed, in order that its speed may increase that of the plane which has not enough space to allow it to take sufficient speed for its lift.

(*b*) *Landing.*—The English, who also have used airplanes at sea during the war, did not hesitate to have these planes alight in the water in the vicinity of the vessels and to accept their loss; and they were contented with saving the pilot with the data he had gathered. To land on a ship presented numerous difficulties; it is well known that an airplane runs some time on the ground, that the pilot loses the lateral direction thereof when he slows while running on the ground, and that he may thus find himself slewed to his right or to his left. Moreover, during stormy weather, it became practically impossible to effect an accurate landing. It was thus necessary to find a means of slowing down and controlling the airplane from the moment it came in contact with the deck of the vessel. Lieutenant Teste was successful in this line also. First, he experimented his method on land on a platform made out of concrete, and during the tests terrible accidents occurred which would have very likely discouraged any man other than Lieutenant Teste. He afterwards installed the platform on the *Béarn*, a battleship which remained unfinished during the war and which is going to be transformed into an aircraft carrier, to serve for the launching and the landing of airplanes.

There is installed on the deck of the *Béarn*, to the right and to the left of the platform, two rows of bags filled with earth. In each row these bags are connected to one another by means of longitudinal

lines maintained slack; finally, the two rows are connected transversally by means of a few lines stretched a little above the platform. The plane arrives following the line of flight, fixing by means of a sighting line a fixed point on the vessel located a few meters above the deck. At the moment he passes over the stern the pilot stops his motor and slacks off a hook placed underneath the fuselage of his airplane. The hook catches hold of one of the transverse lines and by pulling it succeeds in stretching successively all the longitudinal elements of rope which connect the bags; then the apparatus stops within a distance of a few meters, dragging the whole system with it. The hook is attached to the plane by means of a strap which encircles the fuselage; its traction should be such as to prevent the airplane from turning over or from presenting itself tail down; to this effect experience has demonstrated it should pass slightly above its center of gravity.

Forty-five satisfactory landings have been effected on the *Béarn* by 16 different pilots, some of whom were real novices; not the slightest accident occurred. The airplanes which at the end of the war possessed the greatest speed (*Salmson Z–9* and *Hanriot HD–3*) have often landed on the *Béarn*, always bringing up at a distance less than 90 meters from the stern of the ship. None of the foreign navies have been able to obtain such results.

Such is the work of the aviation squadron, which, moreover, takes a great part in investigations concerning fire control by means of radiotelephony and to the bombardment of vessels from a high altitude. These investigations have been so satisfactorily carried out that it is possible even at the present time to foresee all that aviation is sure to accomplish in the future. It is time to consider the transformations which will be required in this line when constructing large units.

It must be added that all this work has given satisfactory results, even though funds are lacking, and the personnel was very limited in number (one mechanician for two or three airplanes). Even though officers and men may work with zeal and be well aware of the nobleness of their efforts, if we want the new discoveries to be of advantage to us it is indispensable to enlist a personnel for naval aviation.

At present no applications are being made to enter naval aviation, either as officer or as sailor. They are not tempted to enlist, probably due to the fact that no pecuniary advantages are offered them and there is no chance for them of obtaining any advancement. However, the noble task accomplished by a few men deserves some assistance from the nation—money and personnel.

TAILLESS AIRPLANE.

2 June, 1922.

News items have stated that M. Arnoux, a Frenchman, has recently invented a tailless airplane, and it is also stated that this plane had passed its preliminary tests very successfully, claiming a speed range of 30–180 miles per hour. The plane is now disassembled and located on the Hanriot works in Paris, and its progress will be watched in view of its desirability, in the event of success, for use on board a carrier, where its stowage space with folded wings would be comparatively small. The controls are reported to be operated by a double set of levers and a double wing camber, which can be set and used as elevators or ailerons, or both together. The fuselage is cut off just abaft the pilot's seat in the conventional tractor plane, and on each side at this point are two large rudders. The engine at present mounted in this fuselage was a 130-horsepower Clerget.

Evidence that this plane has successfully flown seems well founded, but it seems highly probable that the claims for its performance are much exaggerated.

FRENCH AIRPLANE ACCIDENT.

9 June, 1922.

On Saturday, June 3, 1922, a Spad airplane belonging to the Compagnie Messageries Aeriennes, piloted by M. Morin and carrying as passengers one Frenchman, M. Carroll, and one Englishman, Doctor Ley, left Croydon aerodrome for Paris in the normal routine manner. After arriving over the channel and flying at a height of about 2,000 feet, the plane was seen to go into an almost vertical nose dive, from which it did not recover; it struck the water with tremendous force and all occupants were killed. The pilot's body, which was found to be decapitated, and Doctor Ley's body, have been recovered. The accident has brought forth an enormous amount of comment in the British press; also suggestions looking to the provision of greater safety in the future.

The air ministry has made no official statements as to the results of an investigation of this, but the coroner's inquest gave a verdict of accidental death, and it is generally assumed that the pilot's elevator controls carried away completely, or the pilot fainted and fell forward on the stick. Neither of these contentions is fully credited in aviation circles, and one rumor is rather strong in the belief that there was foul play. It has been stated that Doctor Ley was a drug fiend and was in the habit of doing all manner of mad things, and in this trip he had the seat by the pilot, which is above and to the rear of the passenger compartment and comparatively isolated.

It is believed, although no official statement has been issued to the effect, that the body of the pilot will be carefully examined with a view to obtaining evidence of foul play.

THE MARSHALS OF FRANCE.

21 June, 1922.

1. The institution of the marshals of France dates back to a time under the empire when a commission as marshal carried with it certain gifts of property and holdings, after the manner of the nobility. For this reason the practice of appointing marshals fell into disuse under the third republic, the last of the older marshals having died in 1895.

2. No new marshals were appointed until the World War, 1914–1918, when, as a result of war services, the following were appointed, but with the reservation that gifts of property and holdings were no longer included: Joffre, Foch, Petain, Franchet d'Esperey, Lyautey, Fayolle.

3. The law of August 4, 1839 (reign of Louis Philippe), under which the appointment of marshals was thus resumed, provides for 6 marshals in time of peace, which number may be increased to 12 in time of war. Reduction from 12 to 6, from war to peace footing, is accomplished by making 1 new appointment only after 3 vacancies occur.

4. The appointment to the dignity of marshal can be given only to lieutenant generals (generals of division) who have exercised high command in actual operations against the enemy.

GERMAN SPUN-GLASS INSULATION.

7 June, 1922.

The firm of Oscar Gossler, Hamburg, has informed the naval attaché that the spun glass manufactured by them is in great demand in Germany for use on ships, and that the large trans-Atlantic steamship *Bismarck*, recently delivered to England and now called the *Majestic*, employed spun glass almost exclusively for thermal insulation.

As far as regards the price of this spun glass, Gossler states that while it is more expensive than the other insulation material used in Germany, the better insulation which it effects very soon equalizes this added cost. As far as concerns orders for foreign countries, same would have to be computed in the currency of the country in question, but that it would be difficult to state an exact price at this time inasmuch as on account of the continuous increase in the cost of manufacture, the selling price is also naturally changing continually.

At this time, strips of 100 millimeters width cost 35 to 40 marks. These are 15 millimeters in thickness. Gossler also states that he is at present negotiating with persons in America for the sale of his patent.

AUSTRO-HUNGARIAN DAMAGE CONTROL.

8 May, 1922.

The damage control as it existed in the Austro-Hungarian Navy before the war was insufficient to meet the demands made by present-day artillery and navigation in battle. The basic principle of the former regulations in this connection was, in the event of a leakage to remove the cause of same by every power and means at hand—that is, to find the leak and stop it, or at least reduce it and in the second place to remove the water which had penetrated into the interior of the ship.

Since a leakage of any kind causes the ship to list more or less, which affects the maneuvering ability of the ship and the use of the artillery, it can be readily understood that the requirements of navigation and artillery demand a righting of the ship as soon as possible. This requirement was also in full accord with the safeguarding of the ship against capsizing.

It was therefore necessary to reorganize the damage control from an entirely different point of view. The first point was to restrict the spread of the water which had penetrated into the interior of the ship, right the ship at the same time, and remove the cause of the leakage, and leave the stopping up of the leak itself until a later time—until after the battle and the ship had returned to harbor.

The construction of modern battleships by the use of water-tight compartments removes to a large extent the danger to the ship through leakage, thereby enabling the ship to remain as an integral factor in the battle formation and to get the full benefit of the artillery without any diminution, even for a short period, while the ship is engaged in battle with the enemy and wherein may lie the most fatal decisions.

The fact that artillery battles at the present day take place usually at very great distances—distances which require a very high elevation of the guns—shows that even a very slight listing of the ship is sufficient to limit the radius of the artillery. In a listing over 5° it will no longer be possible to train the heavy guns or discharge the ammunition.

The listing of the ship also affects the maneuvering ability and makes it difficult to hold the ship as an integral factor in the formation. Furthermore, the water pipes of the boiler are not then com-

pletely filled with water, which causes an interruption in or failure of the machinery. At least the machinery performance could be so reduced during a battle that the ship would be obliged to drop out of the formation and thus break up the tactical group. All these considerations make it imperative to right the ship with the utmost possible speed. The retention of the equilibrium goes without saying as the most important requirement under all circumstances, which has to be met by the damage control.

Water alarm register.

The damage-control regulations, which will be discussed in detail in the following chapters, were published in a book, the so-called damage-control book, which served as the most valuable book of reference in all cases of alarm. The ship's register was all worked out in accordance with this damage-control book. This register was worked out in two forms, the one as aggregate of the battle register, the second as so-called simple water alarm. The reason for separating these two registers for the same purpose lay in the fact that in the first case, the battle, all preparations for combating the leakage would be made at the time of clearing the ship for action, and all posts would be at once occupied by the proper persons. The second case was that of the simple water alarm; that is, an ordinary case of leakage occurring in harbor or out at sea, where there was not preparation either in a personal way or a material one such as during a battle.

The practice in connection with the water alarm lay especially in the first training of the crews or at the time of extensive changes in the crew formation and was very often carried out at night. In order to have such a practice really instructive in supposing a leakage, it was necessary to have a carefully thought out preparation for the practice of the alarm.

The damage-control book.

A. In the old damage-control regulations one of the bad points was that the direction of the damage control lay in the hands of certain designated persons, and only these persons were actually au courant with all the arrangements in connection therewith. The proviso that these persons should always be on board ship was only true in the case of a water alarm during a battle or when the ship was out at sea, whereas in the case of a simple, ordinary water alarm it was very possible that such persons would not be on board. When, for instance, in harbor during the shore leave of officers and men an alarm would be given, the absence of the first officer, the drainage officer, the boatswain, or the drainage engineer would restrict the

work or make its execution uncertain, so that in really serious cases the results could be very grave. Consequently, the safety of the ship was to be assured under all circumstances by proper measures.

It was therefore desirable to have every officer, engineer, or under-officer in a position to carry out all work in connection with a leakage, either by himself or by directing others and to see that same was properly executed. The failure to turn even a small handle, as, for instance, the adjustment of a valve, could lead to very grave results, and in the absence of the controlling officer it could scarcely be possible for the watch officer in charge to oversee all such omissions and rectify them. Besides, he probably would not have the necessary technical knowledge to do so.

It was therefore necessary to include all the devices and arrangements coming into question at the time of a leakage into a single book, the damage control book. In this book all bulkheads and frames are numbered, each single water-tight compartment is taken up separately, the fighting value of each compartment in the sense of its military importance is explained, and up to the very smallest handle all work and operative measures in connection with the leakage are set forth in detail, (1) in order to limit the extent of the leakage in the ship; (2) to right the ship; (3) and to stop the leak or remove the water from the interior of the ship. Equipped with such a book it was possible for the watch officer and his assistants to carry out safely the necessary measures in the absence of the competent supervisor of the damage control, and it also safeguarded against any serious omissions or errors which might occur in the excitement of the moment.

The damage control book was not only the property of the competent assistants of the watch officer but there were also several copies on board each vessel.

Since the arrangements, etc., in connection with such a service differed with each type of ship and the space at disposition, each ship had its own damage control book, which was especially worked out for the type in question, and became a pertinent part of the equipment of the ship.

Before the details of the book are gone into the different cases will be discussed which served as the basis for the compiling of the book in taking into consideration the battleships of the Austro-Hungarian Navy. It was an open secret that the battleships generally had very weakly constructed bulkheads. The shipbuilder was always forced to sacrifice weight in the equipment and construction of the ship to its military equipment.

The computation of the strength of the water-tight bulkheads allowed for the sheet metal withstanding the water pressure should

the compartment be filled with water, and besides this a little extra was allowed. This reserve strength, however, was too small in the case of all those bulkheads which were weakened by the passage of pipings, cables, ventilation, or speaking tubes. The strength of the bulkheads was altogether inadequate when a hydrostatic overpressure arose in a water-filled compartment through submersion.

If, therefore, in the construction of a ship, impervious and safety tests of the individual water-tight compartments were carried out by simply filling the compartment with water without permitting any swellings or bulgings to take place which exceeded a certain permissible figure these were entirely inadequate.

But the danger of a bulkhead bursting was not the only thing which had to be guarded against, a bulkhead which remained impervious could also give rise to interruptions in operation, for instance, when it bulged or when pipings or speaking tubes were attached to it.

Therefore, in order to combat leakage on a battleship, certain measures were necessary to remove the above-mentioned disadvantages so that the bulkhead of a compartment which was filled with water could be supported and caulked.

Therefore, on the walls of a compartment which were subjected to strain at the time of a leakage, there were certain supports mounted on iron bars. The necessary bars or supports were already cut and prepared and stored according to number in every water-tight compartment. This work could be carried out from a sketch which could be worked out for every individual compartment by engineers, and could be placed in a convenient place in the compartment and also reproduced in the damage control book. There was no longer any need to doubt the security of supports made in haste and in the necessity of the moment.

In order to overcome the listing of the ship, trim cells, which are built into the double bottom, are filled with water by means of a manipulation of the Kingston valve. Such cells contain about 500 tons of water. One trim cell is built in the bow and another in the stern, and in case of necessity the adjacent water-tight compartment, which in dreadnoughts contains the electrical plant, can also be used as a trim cell.

It should be especially noted that the heeling or submersion fore and aft is especially computed for each individual water-tight compartment, and is entered in the so-called damage control book in order to show just how much is necessary to right the ship. A leakage table, included in the damage control book, makes it possible for the officers in charge to determine easily the trim cells the filling of which rights the ship.

HAWAII.

June 19, 1922.

Sugar plantations to show profit this year.

The Hawaiian Sugar Planters' Association announced that they expect the sugar plantations in Hawaii to show a net profit for 1922 of at least $2,500,000 as against a loss that ran into millions last year. They expect to show a profit notwithstanding the fact that no emergency labor relief has been provided for Hawaii. The change from pessimism to optimism which has within the last several months prevailed in Hawaii is due principally to two causes—first, that the price of sugar has been steadily advancing in a small way, and, second, what labor is now employed on the plantations appears to be working in a more efficient state. The so-called "silent strike" among the Japanese has entirely ceased.

Hawaii laborers' association receipts.

It is reported by confidential agents that the total receipts of the Hawaii Laborers' Association (Japanese) during the month of May amounted to about $500. The same report states that after the payment of office expenses and incidentals from this fund barely enough remained to pay one-third of the salary of each of the directors of the association. The Japanese labor officials are predicting larger remittances for the month of June.

Secretary of Hawaii laborers' association predicts bright future for labor organizations should coolie bill fail.

J. Hayakawa, secretary of the Hawaii Laborers' Association, has made the statement that should the pending Hawaii emergency relief measure (Chinese coolie importation bill) be defeated, credit for the defeat of the same will naturally be given to the local labor organizations. He says that this will impress the laborers of all nationalities with the power possessed by these labor organizations, and, therefore, the necessity of keeping them alive. Propaganda of this nature, he says, if put before the laborers, will mean that those who have been reluctant to join labor organizations will be glad to join and receive protection and benefits.

American Federation of Labor official investigating labor conditions in Hawaii.

Mr. Paul Scharrenberg, treasurer of the California State Federation of Labor, arrived in Honolulu on June 13 to remain about four weeks investigating labor conditions in the Territory. According to statements made by Mr. Scharrenberg, he has come to Hawaii upon the request of Mr. Samuel Gompers, president of the American Federation of Labor. He further stated that he is here to investigate certain statements which were made by members of the labor com-

mission on behalf of the emergency labor resolution now pending in Congress. Mr. Scharrenberg says that he expects to visit the plantations throughout the Territory and make inquiries from the laborers themselves concerning wages, working time, sanitation, and housing conditions, and whether or not the necessity for additional labor is as the reports have been made to Congress.

Mr. Scharrenberg was asked if he intended to investigate the affairs of the United Workers of Hawaii. He replied that he did not expect to look into that organization. It is not believed that the above statement is correct in view of the fact that Mr. Gompers, in correspondence to officials of the United Workers, expressed keen interest in that organization. George W. Wright, sponsor for the United Workers, is probably the most well-informed white labor official in the Territory and his advice and cooperation will undoubtedly be requested by Mr. Scharrenberg in his investigation.

Mr. Scharrenberg stated that he was going to publish a report of his investigation after his return to the mainland, but that no partial report would be made public during his stay in Hawaii.

Officials of Japanese and other labor organizations in the Territory are elated over the visit of Mr. Scharrenberg, as they believe that it will afford them an opportunity to state their side of the case regarding labor conditions in the Territory. They expect these statements to be presented before Congress through Mr. Gompers. It is reported that all labor organizations have gathered together data and information concerning labor conditions in the Territory, which will be presented to Mr. Scharrenberg. The Japanese labor organizations are also planning elaborate entertainments for him during his stay in Hawaii.

New textbooks for Japanese-language schools to stress Americanization.

The work of revising the schoolbooks for the Japanese-language schools is nearing completion, and it is expected that they will be ready for the new school term. The two main objects being borne in mind by those charged with the revision are, first, a reduction of the mental burden on the child due to the curriculum now in force in the Japanese-language schools which amounts to a twofold education whereby the pupils receive their education in both Japanese and English; and, second, the Americanization of the children attending the language schools. To accomplish the first object, the number of Chinese characters of the Japanese alphabet, known as Kanji, will be reduced as far as possible, and the pupils will receive increased instruction in the Katakana alphabet. This will mean the elimination of a great many of the Chinese characters which, in themselves, are very complicated and require a greater amount of study on the part of the Japanese children to learn to read and

write them, and the substitution of the Katakana, or the square Japanese characters whose construction, both as to reading and writing, is more easily grasped by the Japanese pupils. Lessons in the Roman alphabet have been added so that the Japanese will be able to write Japanese by the alphabet more well known to them. For example, if the phrase "Japanese society" would be desired, it would be written in the Roman alphabet thus: Nihonjinkai. This would eliminate the use of the Japanese character. Telegraph and wireless messages in Japanese are usually written as per this example.

It is reported that the following features are included in the revision:

1. Material that is helpful in the making of good American citizens.
2. The words and deeds of eminent persons, helpful in fostering the moral character of children.
3. Stories, fairy tales, traditions, proverbs, etc., that are interesting to and helpful in cultivating the moral character of the children.
4. Lives of contributors to civilization, events in connection with them in America and Hawaii and elsewhere.
5. Geographical material closely related to America and Japan, and especially Hawaii.
6. Natural phenomena and objects in nature especially of interest to children.
7. Natural features helpful to esthetic culture, and poems and prose relating to humanity.
8. Material relating to health and sanitation.

Racial groups.

Activities of new Japanese Society of Hawaii.

At a recent meeting of the Japanese Society of Hawaii, held at the Tenin (Store Clerks') Club, a resolution was unanimously passed indorsing the stand taken by Consul General Yamasaki regarding the so-called Japanese menace in Hawaii. The Delegate to Congress, Mr. Harry A. Baldwin, and Mr. Walter F. Dillingham, chairman of the emergency labor commission, stated before the Senate Immigration Committee that a Japanese menace actually existed in Hawaii. As reported, the Japanese consul general, in commenting on the alleged statements, denied the existence of a Japanese menace in Hawaii. The statements of Messrs. Baldwin and Alexander are practically a repetition of similar statements made last year by the members of the labor commission in Washington and by the then Delegate to Congress, the late Prince Kuhio. The Japanese consul general at that time, Mr. C. Yada, made no comment on the state-

ments. The present consul general in denying these latest statements has made the issue an official one.

The members of the Japanese Society of Hawaii at this meeting not only indorsed the stand of the Japanese consul general, but they also decided to make a very careful investigation of the so-called Japanese menace in Hawaii, the results of which are to be made public. Dr. T. Harada, professor of Japanese history at the University of Hawaii and the leading Japanese propagandist in Hawaii, was delegated by the society to make the investigation.

Japanese Society of Hawaii elects new president.

Dr. Iga Hori, president of the Japanese Society of Hawaii, resigned the position several days ago. Ill health was given as the reason for his resignation. It is reported that he will depart soon for a vacation trip to Japan. Doctor Hori is regarded as the most influential Japanese in the community; as a matter of fact, many persons regard him as the real head of Japanese activities in Hawaii.

At a meeting of the society held on June 14 Mr. Shiro Nakao, manager of the local branch of the Yokohama Specie Bank (Ltd.), and first vice president of the society, was elected president.

Remittances of Japanese in Hawaii to Japan.

According to the police department of the Hiroshima prefecture in Japan, the amount of money returned to that province during 1921 by Japanese, former residents of the Hiroshima prefecture and now living in Hawaii, totaled 3,203,087 yen, or slightly more than $1,500,000. Of this amount 1,771,299 yen were sent by remittances and 1,431,788 yen were carried there.

The total amount contributed to the coffers of Hiroshima prefecture by Japanese living abroad aggregated 10,290,090 yen, of which 4,894,985 yen were sent by remittance, 5,395,105 yen were carried there. Comparison of the total amount of money which found its way into Hiroshima prefecture from Japanese living outside of that prefecture shows that the quota received from Hawaii totaled slightly more than 30 per cent.

The figures received from the police department of the Hiroshima prefecture were received in Hawaii by the Nippu Jiji.

Plan to deport Japanese aliens convicted of illicit manufacture of liquor.

According to information published in the local Japanese press, a bill passed the House of Representatives in Washington on April 5 which provides that all aliens who are convicted of violating, or conspiring to violate, the national prohibition act shall be deported after serving their terms of imprisonment.

Nothing definite pertaining to this law has reached Honolulu, but if such a law becomes operative and the Japanese in Hawaii main-

tain their present high percentage for persons convicted of violations of the prohibition act it will undoubtedly be the means of decreasing the alien Japanese population in Hawaii, provided, of course, the United States Government officials enforce the law strictly.

Convicted Japanese labor leaders perfect their appeal.

During the week attorneys for the 15 Japanese labor leaders, convicted several months ago for conspiracy in connection with the cane laborers' strike in 1920, have perfected their record on exceptions from a judgment of the circuit court, and the question of appeal for the defendants is now being argued before the Territorial supreme court.

Pacific coast Japanese want training squadron to call at San Francisco.

According to local Japanese newspapers, the Japanese newspapers in San Francisco are agitated over the omission of San Francisco as a port of call for the Japanese training squadron which is soon to leave Japan to participate in the Brazilian centennial. The vessels are due to reach Honolulu on July 9. One of these Japanese newspapers of San Francisco is quoted as saying that the omission of San Francisco as a port of call is due to a desire to avoid any anti-Japanese demonstration or agitation that may crop up should the squadron call at San Francisco.

American-Japanese relations.

Local press comments on statements of Hawaii's Delegate to Congress.

With reference to the alleged statements as to the Japanese menace in Hawaii and the unassimibility of the Hawaiian-born Japanese made by Hawaii's Delegate to Congress, Mr. Harry A. Baldwin, and Mr. Walter F. Dillingham, chairman of the Hawaii Emergency Labor Commission, before the Senate Immigration Committee in Washington last week, several days after the publication of these statements appeared the following editorial in the Honolulu Star-Bulletin:

ONLY TIME CAN ANSWER.

There will be decided difference of opinion here on the statement concerning Hawaiian-born Japanese attributed to Delegate Baldwin in his testimony yesterday before the Senate Immigration Committee. A dispatch quotes the Delegate as having said that the Japanese are not assimilated by the American population, "even those born in Hawaii maintaining their racial isolation." During recent months the Star-Bulletin has heard a good deal on this subject from men and women brought closely into contact with Hawaiian-born Japanese. The majority whose expressions this paper has heard believe that assimilation is already plainly under way, but that it is quite too much to expect the first generation born in Hawaii to be assimilated in the sense that Caucasian

immigrants and their children are assimilated in communities where Caucasians already predominate. It is too early to pass final judgment on a situation so dependent both on the passing of years and on the play of friendly or unfriendly influences on the youths born of oriental immigrant parents. These youths must realize that their own attitude, actions, and deportment will determine the nature of the answer made to the question, "Are they assimilable?" The situation offers distinct hope for the future, and the formation of such societies as that of the young American citizens of Japanese ancestry lights that hope with a ray of concrete fact.

The Nippu Jiji, local Japanese daily, which is believed to be the mouthpiece of the official Japanese propaganda in Hawaii, in an editorial entitled "Japanese bogey up again," endeavors to discredit the statements of Messrs. Baldwin and Dillingham. The following extracts are taken from this editorial and quoted below because they show that no matter how conservative or how pro-American the local Japanese newspapers may endeavor to impress one, their columns are always open for publication of pro-Japanese sentiment:

* * * Not once but several times have the Japanese been victimized by untrue statements in order that the proposition to bring Chinese into the Territory might come through. They have been subjected to scathing criticism, loaded with unjust reproaches and put up as a target for mud slinging.

The statements relative to the Japanese made by Harry A. Baldwin, Hawaii's new Delegate to Congress, who is supposed to know the Japanese here, being intimately associated with them for many years, took us by complete surprise.

The main purpose of the Hawaii emergency labor legislation is to break the domination of the Japanese in the islands, according to what Delegate Baldwin is reported to have testified before the Senate Immigration Committee. Americans would be driven out of the islands unless the growing industrial activity by orientals is checked, he is said to have told the committee.

Not many American-born Japanese are exercising the right to vote because they have been advised not to vote until they have enough ballots to count for something, the Delegate is quoted as saying in another part of the dispatch. He further made the statement that Japanese are not being assimilated by the American population, even those born in the islands maintaining racial isolation.

The Delegate furthermore, in his discussion of the situation in Hawaii, made it appear that the alleged attempt of the Japanese to control the island sugar industry through the purchase of plantations and the increase in their land holdings are evidence of anti-Americanism on the part of the Japanese.

The charges are not new but the constant drilling of the mainland people by responsible persons with false reports and misleading views will create wrong impressions of Hawaii. It will place Hawaii in a false light, have an unfavorable effect upon American-Japanese relations, and injure the future welfare of these islands.

Americanization is strongly emphasized among the Japanese here, and a stick-to-the-soil campaign is being conducted among them. Every effort is being made to overcome the obstacles. Under these circumstances the American action, which tends to destroy our constructive program, moves us to wonder.

Against this Consul General Yamasaki contributes a statement in the English-language paper, and stingingly criticizes the injustice of producing the

Japanese bogey at Washington. Thoughtful Americans would surely agree with the consul general's strong statement.

The Nippu Jiji is considered to be the most conservative Japanese newspaper in the Territory.

Fifty per cent of local Japanese newspaper staff American citizens.

According to an article recently published in the Nippu Jiji, of the eight men employed on the staff of that paper, excluding the editor, four are Hawaiian-born Japanese. They are: John Y. Matsumura, James T. Hamada, S. Kawamura, and S. Maruyama. The last-named is editor of the English page of the Nippu Jiji.

Japanese high-school graduations.

The Japanese high school, controlled by the Hongwanji Buddhist sect, will graduate 90 students at the close of this year's school term. It is said that this number of senior students graduating is slightly larger than in previous years. Practically all of those graduating are Hawaiian-born Japanese and, therefore, American citizens. Next year it is planned to construct an addition to the high-school building to take care of an increased number of students expected to be enrolled for the school term of next year.

Mainland Japanese advises how Japanese should handle anti-Japanese agitation.

Mr. S. Koh, manager of the San Francisco branch of the Sumitomo Bank, who passed through Honolulu recently en route to Japan, in an interview to local Japanese newspapers is quoted as having stated that the only hope for the Japanese of California, in the matter of the agitation against them, is to look forward to the growth of their children. This statement indicates that the Japanese believe that when enough American-born Japanese are in California to wield a powerful political influence all the anti-Japanese agitation will cease.

BRITISH TRADE WITH ITALY.

28 May, 1922.

The aspect of the Italian market at the end of 1921, from the point of view of British trade is distinctly unfavorable. One merchant puts it that "most British business for many months past has consisted in collecting old debts, or trying to collect them with as little sacrifice as possible rather than resort to lengthy law suits." Another estimated that the stock which he used to sell in one year would now, at the present rate of demand, take over five years to dispose of. With some exceptions, of which the most notable are tex-

tile machinery, tinplate machinery, machinery accessories, such as belting and English cloth, which wealthy people are still willing to buy at any price, there is practically no demand for most of the British products which previously had sale in this country. In the case of coal, England's principal export in Italy, there has recently been a slight revival. On the whole, trade may be considered to be on the upgrade, and the danger from American competition is much less, partly because, when it can be got, British coal is preferred to American on account of its quality. But whether this tendency will continue in the present state of the Italian metal industry and with the prospect of the delivery in 1922 of 8,000,000 tons of indemnity coal from Germany is very problematic.

In some cases this state of trade may be attributed to the high prices asked for British goods, prices which would limit the demand even if there was no question of exchange. The reluctance of the metal-working industries to embark on new ventures at the present time helps to account for the falling off in the demand for iron and steel. Surplus war stocks and increased local production are other contributing causes. There has not yet been time for the effect of the new tariff to be fully felt, but it will undoubtedly be very great, both in stimulating competitive industries in Italy and in raising prices to the level at which demand drops off. The failure of British exporters to study the conditions of the market has often been alluded to and still exists to a certain extent as one of the reasons why British trade is not more flourishing.

In the opinion, however, of local observers, by far the most important factor is that of exchange. This makes itself felt in many ways. The depreciated purchasing power of the lira, with its result on prices, prevents the sale of British goods even when England is the only, or the principal, source of supply. The fluctuations of exchange make Italian buyers reluctant to risk forward contracts, especially in view of a recent decision in the Italian courts to the effect that, in the absence of a stipulation to the contrary, payment must be made at the rate ruling on the date of payment and not that of the day when the contract was concluded.

In practice it is becoming common to agree in the contract on a maximum rate of exchange, giving the buyer the faculty of paying either at this rate or at such lower market rate as may be current when payment is due. To the extent to which the conditions of business permit, this method may be strongly recommended to the attention of British exporters, since it is a very popular one with the Italian buyer and is a strong inducement to him to do business.

Finally, exchange affects trade through the advantage which it gives to competing countries whose currency is depreciated. This

shows itself especially in the case of Germany which, owing in large measure to the low value of the mark, is flooding the Italian market with goods of every kind at prices which British exporters can not attempt to equal. In one case an article of German make is being sold retail at 85 lire, whereas, the same article from England costs the wholesale agents in Italy 135 lire, and many similar instances could be quoted. It has been suggested that the remedy is for the Italian Government to impose a differential tariff varying according to the value of the currency in the country of origin, so that British and German goods might compete on equal terms. It is most unlikely that the Government will be induced to take any such step, and this was plainly indicated by the minister of commerce in the course of a speech delivered in the Chamber of Deputies on December 1.

It would deprive Italy of the power of buying in the cheapest market, and would, moreover, tend still further to depreciate the mark, a result directly contrary to Italian interests, since Germany is the principal buyer of the agricultural products, which are one of Italy's most important exports. The solution proposed by Italian economists is that any country desiring to increase its trade with Italy should give special facilities for the export of Italian products, and in the case of Great Britain particular reference is made to improved means of transport.

The proposal appears to deserve consideration. Rapid direct overland traffic between England and Italy would not only benefit Italian exports, especially fruits and vegetables, but would also be advantageous to British exports to Italy. Many articles from Germany which compete with British manufactures, are at present sent loose in truck loads, thus saving the cost of packing and the extra duty paid on gross weight. In one typical case the cost of packing, duty on packing, and freight on packing amounted to 28 per cent of the net value of the goods, which in effect constituted a preferential duty in favor of the German article to that extent.

The prevailing view among British agents in Italy is that the exports credits scheme will not have any considerable influence in attracting buyers at the present moment. High as exchange is, there is small confidence that it will have declined when the period of the credit is exhausted; it might indeed be higher. Moreover, the absence of credit is not at present the main impediment to business, since the Italian importers have already considerable credit facilities in the country through their own banks. The scheme, however, has been made use of to a certain extent in connection with the import of coal.

ITALIAN TORPEDO ATTACHMENT.

17 May, 1922.

A torpedo attachment was mentioned in Il Tempo as being successful at trials in Spezia; the attachment was such that a torpedo missing a ship astern would be automatically turned into the wake of the target ship, and if faster than the speed of the ship would attain its mark.

This is not to a new type of torpedo but to an auto-directing addition which, when applied to the usual torpedo guide (guida-siluri) and without modifying its operation, causes the torpedo to pass in the wake of the target ship (rather than strike its side) at a distance of not over 70 meters, the torpedo being effective naturally only when its speed is greater than that of the target.

The trials mentioned by Il Tempo were carried out at Spezia against the Italian ship *Pisa* with positive results.

The inventor has conceded the rights to use and build his apparatus to the Royal Italian Marine for the use only of the navy. His invention, however, is covered by foreign and national patents.

THE REAL INTENTION OF MILITARISTIC JAPAN.

Source: Lieut. Col. B. Roustam Bek.

(Written for The Peking Daily News.)

5 June, 1922.

Despising forewarnings from the powers and from the reasonable section of the Japanese press, the Tokyo militarists do not seem to be willing to modify their policy in regard to the Russian Far East. Instead of diminishing the number of the Japanese troops in the Maritime Province, as was so often promised, the fresh contingent from Japan has already reached Vladivostok some days ago. The Japanese military clique stands by its decision firmly. The plan of annexation of the most important region of the Far Eastern Republic by Japan is designed in Tokyo, and has to be carried out at all cost.

Several days ago, the Russian newspapers established the fact that the reorganized counter-revolutionary army of the so-called Merkuloff's government, which was under the white general, Molchanoff, and defeated by the people's revolutionary army under Commander Bluher, has now entered Vladivostok fully armed. It is firmly stated that these Russian counter-revolutionary forces passed the neutral zone without any objection from the Japanese authorities; this is contrary to the recent official assurance from the Japanese military command. The careful preparations, in case of

emergency, are in full swing throughout the regions occupied by Japan, which is gradually securing the protection of both flanks of her future battle line, which may extend from Kamchatka to Mongolia.

The purchase of the Commandor Island, east of Kamchatka, from the self-styled Merkuloff government was at once followed by the dispatch there of two Japanese warships and one transport with troops. Now, we are informed that four destroyers and one warship are leaving Japan, in addition to the already dispatched naval crafts. This is happening on the extreme right flank of the Japanese line of aggression against the Far Eastern Republic. In order to protect their main operations, which undoubtedly will be directed against Habarovsk, the Japanese general staff is very anxious to utilize North Manchuria, as its possession would be a great advantage to Japan in preparing a very serious outflanking movement, and even the rear of the people's revolutionary army could be considerably threatened. In order to attain this, militaristic Japan is exerting all efforts to restore Chang Tso-lin's prestige, whether the Manchurian provinces would be declared independent of China or would become autonomous under the suzerainty of the Central Government.

The Japanese general staff knows it very well, that in both cases it would remain master of the situation should Chang Tso-lin, thanks to the assistance of Tokyo, be restored to power. As far as we can judge, Japan has, according to the latest information, fully succeeded in this.

While the Chinese politicians would discuss the question of the reconvocation of the old parliament and of the importance of creating a national army under one control, Chang Tso-lin, with the help of his Japanese friends and the Russian counter-revolutionaries, would be able to reestablish his prestige in Manchuria, Jehol, and Charhar. Since his failure in his ambitious fight against Gen. Wu Pei-fu, he has for the present abandoned the idea of becoming a dictator of China and may thus shape his policy in quite a different direction. Now, the Russian counter-revolutionaries would be once again utilized by him in full.

It must be noted that since the defeat of the ex-Mukden war lord the anxiety of the Russian reactionaries in Manchuria has ceased, as they realize that Gen. Wu Pei-fu does not intend to continue his advance beyond the Great Wall. When this became certain the activity of the Russian white chieftains in Harbin and Mukden had suddenly increased. They fully realized that Chang Tso-lin now needs them as much as his Japanese supporters. As a matter of fact, the losses suffered by Chang Tso-lin's army during the last

civil war were, in spite of his complete defeat, considerably less than those reported in the press. It seems that he lost only a few pieces of heavy artillery, and those field artillery could be replaced easily and at a moment's notice by the Japanese. He has trained men, and this is the principal question for Japan.

On the other hand, the Japanese general staff can not overlook the fact that after such a bitter lesson which he received from Gen. Wu Pei-fu, the ex-Mukden war lord must have realized that it is foolish to fight against a national armed force, backed by almost the whole population of China. This makes it easy for the Japanese militarists to utilize Chang Tso-lin as a puppet for quite a different matter, namely, to use his armed force against the Far Eastern Republic and Soviet Russia.

The fact that Chang Tso-lin is holding the Chinese Eastern Railway can in no case be minimized. The railway is practically guarded by the Russian counter-revolutionaries. In the case of the opening of hostilities between the Far Eastern Republic and Japan this railway would, no doubt, fall under the absolute control of the Japanese troops. And this, from the military standpoint, would be quite natural as of purely strategical necessity.

Summing up the situation in the Russian Far East and remembering that in spite of all the optimistic hopes of the powers at the Genoa conference the Russian situation in the Pacific remains as gloomy as it was when that conference started, I come to the conclusion, as expressed in one of my former articles, that Japan has intentionally broken off the negotiation in Darien with the idea of transferring the question about the Russian Far East to Genoa.

The question, which had been raised by the Japanese delegates several times during the session of the political committee of the Genoa conference on May 17, was that the Far Eastern Republic should be excluded from the nonagression pact, and this proves my assertion entirely. Even Mr. Lloyd-George was unable to bring the Japanese to reason.

The British premier, for the first time, used very severe language in arguing this question with the Japanese delegates, expressing his suspicion that militaristic Japan must have special designs on the Far Eastern Republic if it insists on that point so obstinately. The Japanese delegates, as the message informs us, have promised to ask Tokyo whether the Japanese Government would agree to include the Far Eastern Republic in the states supposed to be immune from aggression by virtue of the nonaggression agreement.

There can not be the slightest doubt as to the answer to be expected from Tokyo in regard to this question.

In spite of such a Japanese protest the principle of applying the nonaggression pact to the Asiatic frontiers of all the allied republics of Soviet Russia was accepted by all the powers except Japan.

In the other agreement connected with Russian affairs the Japanese delegates make a reservation that it has no reference to the presence of the Japanese troops in Siberia.

This is quite sufficient for us to understand that militaristic Japan is seeking to obtain an absolutely free hand in the Russian Far East in order to be able to launch another sudden and determined attack against the Far Eastern Republic.

We are on the eve of great events. The world must be ready for them.

JAPANESE NAVAL AVIATION PLANS.

26 May, 1922.

Naval aviation being affected less by the arms conference than other branches of the naval service, the following plans are being drawn up and the aviation stations at Kure and Maizura, now temporarily out of commission, are to be completed during the fiscal year of 1925:

The naval aviation station at Kasumigaura is now known as the training ground attached to the Yokosuka Aviation Station, and it is scheduled to become one of the important centers of the naval air force.

Overwater equipment will be completed during this year and planes under project will be ready by end of fiscal year 1923. The station at Kasumigaura will then consist of seven groups with eight planes each, which is divided into five and one-half groups for aerial defense and one and one-half for overwater service.

At Yokosuka the number of airplanes that will be ready by the fiscal year 1925 is three groups of overwater and two groups for aerial defense.

The station at Sasebo will be completed during the fiscal year 1925 and will have three groups of overwater planes. At present it has only one group.

At Omura station it is expected the equipment will be placed in commission during this year. Two aerial defense groups of planes will not, however, be ready until 1925.

It is expected that by 1925 a total of 17 groups will be in commission for overland service and about 200 for aerial defense. It is planned for all ships, above cruisers, to carry planes.

FRENCH AIRPLANE DESIGNERS TO TRAIN JAPANESE.

9 June, 1922.

A press report of May 19, 1922, states that three expert French airplane engineers, headed by M. Du Bogson, of the Farman Co., of France, will arrive in Japan about the end of June. They will be accompanied by three designers from the same company and will at once take up the work of airplane construction at the Tokorozawa School of the imperial Japanese Army.

M. Du Bogson and his assistants will train some of the members of the Japanese Army in engineering and in the construction and designing of the Farman airplanes.

JAPANESE DEPOT SHIPS FOR AIRPLANES.

9 June, 1922.

The following press notices regarding depot ships for airplanes have been noted:

(1) The *Hoshow*, 9,458 tons, 25 knots, carrying 20 planes, is fitting out at Kokosuka. She is expected to participate in the grand maneuvers next October.

(2) The *Hokoku*, sister ship to the *Hoshow*, will be launched during fiscal year 1922.

The *Amagi* and the *Akagi*, whose construction was suspended owing to the naval treaty, are to be rebuilt as 26,000-ton depot ships, have been renamed the *Chogei* and *Taigei*, respectively. The work of reconstruction will commence as soon as the treaty goes into effect and will be completed and commissioned by the end of fiscal year 1924.

JAPANESE OBTAIN DIRIGIBLES FROM FRANCE AND GERMANY.

26 May, 1922.

An officer of the Japanese Navy and party, who went to England, France, and Germany to investigate aviation matters, completed arrangements for the purchase of Zeppelins from Germany. They are expected in Japan during the latter part of June, 1922. Sheds are now being built at Kasumigaura air station by German experts with material shipped from Germany.

A flexible *Astra* type airship was ordered from France this spring, and the above party is now in France awaiting its completion. It is expected the ship will be shipped to Japan in the near future and will be making flights in August.

The S. S. T. type, which was recently put to flight here, will be called *No. 1*, and this *Astra* type will be called *No. 2*. The following is a comparison of the two:

	S. S. T.	Astra type.
Length	51.8 meters	80 meters.
Diameter	11 meters	16.5 meters.
Volume	3,323 cubic meters	10,700 cubic meters.
Buoyancy	3.55 tons	11.77 tons.
Height attainable	2,000 meters	3,000 meters.
Continual flight under full speed	15 hours	11 hours.

As will be seen from this, No. 2 is about three times larger in volume and buoyancy than No. 1, making the comparison between the two as that between a battleship and cruiser. However, as they are both of flexible type, they can not be compared with the rigid type, which is far superior in many respects. The navy department is contemplating adopting the latter type, but due to the cost of construction, which is almost equal to the cost of a light cruiser, the matter will not be taken up at present.

NAVAL AIR STATION PLANNED AT OMURA.

26 May, 1922.

Preparations for the erection of a new naval air station at Omura are being made by the navy department, ground for the structure having already been purchased. It is expected that the new station will be in operation early in the fiscal year of 1923.

Establishment of the station at Omura will give the navy department independent units at Yokosuka, Kasumigaura, Sasebo, and Omura. The Kasumigaura station at present is a branch of the Yokosuka station, but will be made an independent station, according to present plans.

Omura is just a short distance north of Nagasaki, on Omura Bay, longitude east 130°, latitude north 32° 55′.

JAPANESE RECEIVE WAR MATERIAL FROM GERMANY.

26 May, 1922.

The *Matsuye-maru*, of the O. S. K. Line, arrived in Yokohama from Hamburg on May 13, 1922, and proceeded to navy yard at Yokosuka on the 17th, where she is to discharge 100 airplanes and 50 motor cars.

The airplanes are for the navy and are to be shipped to the naval aviation station at Kasumigaura.

The motor trucks are for the army.

JAPANESE PERSONNEL.

26 May, 1922.

(Number of officers and men and vessels to be dropped from Japanese Navy upon the Washington conference becoming effective, as estimated by a newspaper man of the Japanese press.)

As soon as the naval treaty goes into effect, the first period of scrapping will have to start. It is estimated that about 10,000 men and officers will be dropped from the navy complement, which will have to be carried out gradually.

It is estimated the following ships will have to be scrapped or made useless as warships within six months after the naval treaty becomes effective:

Name and age of ship.	Years.
Shikishima	22
Asahi	21
Hizen	20
Mikasa	20
Kashima	16
Katori	16
Satsuma	12
Aki	11
Settsu	10
Ikoma	14
Ibuka	12
Kurama	11

Out of the above-mentioned vessels, the *Shikishima* and *Asahi* will be reserved as noncombatants and the rest will be dismembered within 18 months. The *Hizen* and *Mikasa* were already decided upon as far back as last year to be placed in the reserve.

With the scrapping of these ships men aboard them will naturally become unnecessary, and they represent the number of officers and men who will eventually be dropped from the service on account of naval limitation. As the approximate complement of these vessels is known, a very good estimate of the total number of personnel to be dropped is as follows:

Name of ship.	Officers (above warrant).	Petty officers and sailors.
Shikishima	40	700
Hizen	40	700
Asahi	40	700
Mikasa	40	700
Kashima	50	800
Katori	50	800
Aki	60	900
Satsuma	60	900
Settsu	60	1,000
Ikoma	50	800
Ibuka	50	800
Kurama	50	800
	590	9,000

As to the third reserve ships, while the number of officers are not much reduced men aboard the *Shikishima*, *Hizen*, *Asahi*, *Mikasa*, *Kashima*, *Katori*, and *Ikoma* are now reduced to half of the regular complements and those on the *Ibuka* and *Kurama* are less than 20 per cent of the regular complement, while those aboard the *Aki*, *Satsuma*, and *Settsu* are left as they were for the present. Even when ships are being scrapped they will need men, and their discharge will be gradual, and the same is true with the officer personnel, which will be dropped gradually and at various times.

NEW JAPANESE SHIPS.

9 June, 1922.

The Japanese press advances the opinion that the following decision in regard to the armaments for the ships to be built for the Japanese Navy in the future was the result of the meeting of chiefs of the ordnance bureaus:

Cruisers.—(*a*) Large type, 10,000 tons: Sixteen 6-inch guns, four 4-inch guns (antiaircraft), eight torpedo tubes, above water. Speed, 35 knots; armor plate, 5-inch. (*b*) Small type, 5,500 tons: Seven 6-inch guns, two 4-inch guns (antiaircraft), eight torpedo tubes, above water. Speed, 30 knots; armor plate (only in vital places), 3-inch.

Destroyers.—(*a*) Large type, 1,300 tons: Four 5½-inch guns, six torpedo tubes, above water. Speed, 35 knots. (*b*) Small type, 850 tons: Three 5½-inch guns, four torpedo tubes, above water. Speed, 31 knots.

JAPANESE CRUISER LAUNCHED.

9 June, 1922.

The Japanese light cruiser *Kinu* was launched May 27, 1922, at the Kawasaki dockyard, Kobe, Japan.

The keel of the *Kinu* was laid January 17, 1921. The length of the ship is 500 feet, being 46 feet 6 inches in beam, draft of 15 feet 9 inches. The main armament consists of seven 14-centimeter guns, two machine guns, eight submerged torpedo tubes, two 3-inch antiaircraft guns. Complement is 450 officers and men. Designed for 33 knots speed. Fitted with four geared turbines.

TRIAL TRIPS OF JAPANESE DESTROYER "SUMIRE."

26 May, 1922.

The official trial run of the Japanese destroyer *Sumire*, which was constructed at the Ishikawajima dockyards, was made May 16, 1922, off Tateyama, under the supervision of the chief equipment officer, the commanding officer, and others.

The vessel proceeded from Yokosuka toward Tateyama to try the four-hour continuous full-speed run. The vessel failed to come up to the requirements in this trial on account of trouble in her boiler tubes. She was taken back to Yokosuka, and en route there other trouble occurred in the oil-heating arrangement, and it will be necessary to replace some parts of this equipment.

It was rumored that some "crooked" dealings were being made in the turning over of this vessel to the Government, but after an investigation the Government officials stated they were unable to substantiate this rumor.

Other reports state that the vessel is a complete failure.

JAPANESE OIL RESOURCES.

9 June, 1922.

The Imperial Government is credited by the Japanese press with a resolution to replenish the oil resources of the country.

It is said that the authorities feel that the limitation of armaments encourages rather than discourages an oil policy for the purpose of maintaining the fighting efficiency of the reduced fleet and of developing the aerial services.

According to the calculation of the press, Japan needs 160,000,000 gallons of oil per year in peace time and three times that amount in war time. At present only 80,000,000 gallons per year is produced in Japan.

It is stated that Government will make as many oil contracts in as many parts of the world as possible in order to preclude the possibility of a shortage in time of war, and that 5,000,000 yen have been appropriated to the navy for purchasing heavy oil in foreign markets this fiscal year and that eight special commission ships of the navy, the *Sunosaki*, *Tsurugizaki*, *Shiretoko*, *Notoro*, *Shiriya*, *Noma*, *Erimo*, and *Sata*, have been commissioned to transport heacy oil from different foreign ports. Five of these oil tankers, the *Sunosaki*, *Sata*, *Erimo*, *Shiriya*, and *Noma*, have already started for Tarakan Island in the South Seas, another tanker, the *Shiretoko*, being en route to Persia.

JAPANESE WIRELESS STATION AT SHUANGCHIAO.

6 June, 1922.

The Japanese have at last managed to land and install at Shuangchiao a high-frequency alternator of 200-kilowatt capacity.

The Mitsui Co., who contracted for the manufacture of two 500-kilowatt high-frequency alternators, frankly admit they are

unable to build the same, and state the best they can do is to build a high-frequency alternator of 200-kilowatt capacity.

The wireless plant, therefore, can only develop 40 per cent of its contracted capacity, and the sending masts are 120 feet shorter than contracted for.

It is common knowledge in the Far East that the blue prints from which the Mitsui Co. built these alternators were furnished by the General Electric Co., but one can not help fróm believing that these blue prints may have been slightly different from those which the General Electric Co. used to build their alternators.

The engineering world of the Orient considers the whole proceeding as a huge joke and one well deserved by the Japanese, for the basic idea of the Shuangchiao wireless plant was a scheme engineered by the Mitsui Co. under Japanese Government subsidy to build and operate for an indefinite length of time a high-power wireless station on Chinese soil, as the Japanese were well aware of the fact that many years would elapse before China's finances would permit her to buy the same from the Japanese for the sum of money stipulated in the contract.

At present the Japanese are attempting to induce the Chinese Navy Department to purchase this wireless plant for a reduction of 25 per cent on the original sum contracted for.

JAPANESE ACTIVITIES IN KOREA.

18 April, 1922.

The Japanese are realizing that their attempt to govern Korea is a complete failure and they thoroughly recognize the danger of the spread of Bolshevism in that country.

The Korean independence movement is entirely in the hands of Korean Bolsheviks educated in Siberia and is to-day being financed by money received from Moscow and Irkutsk.

The Japanese are again attempting to promote the restoration of a Korean monarchy by installing Prince Li-un as King of Korea. Prince Li-un is the third son of the last King of Korea, Li-hi, whom the Japanese foully murdered in January, 1919.

Prince Li-un has been living in Japan for the last 11 years and is married to a Japanese.

JAPANESE EDUCATION.

12 May, 1922.

The Japanese Government has decided on a policy of extending the period of compulsory education from the present six years to eight, to be enforced from the fiscal year of 1926. The question

of the extension of the period of compulsory education has been receiving the attention of the Government for some years, but for financial reasons has not been settled. The reduction of armaments, which was agreed upon at the recent Washington conference, removed to some extent the financial difficulties in the way, and the present Government, as declared during the recent session of the Diet, desires to employ the surplus to be created on that account for the promotion of cultural enterprises. There are, of course, many things calling for the Government's attention, such as improvement of riparian works, development of productive industry, reform and reconstruction of harbors and roads, and the spread of education.

The extension of the period of compulsory education was a subject of some interpellations during the last session of the Diet. Both the Premier and the Education Minister expressed themselves in agreement with the interpellators in the view expressed, and have promised to carry out the suggested extension at the earliest possible opportunity. The extension of this period by two years entails an increase of some 4,000 classes, each consisting of 50 children. The additional number of primary-school teachers required will be 8,000, and the expense will be approximately 20,000,000 yen. It is expected the Government will formally declare its policy in next session of the Diet.

JAPAN AND THE WORLD.

Source: Pan-Asiatic Empire. (A Résume.)

Germany had huge dreams. So has Japan. Japan's dreams are of the same quality as were those of Germany. Germany found her dreams nightmares; superhuman man fell from the "high horse," and it took the entire world to awaken him. What will Japan's dreams turn out to be? Will Japan awaken from them by her own initiation? Or will it require the effort of the world to arouse her from this nightmare? She is still dreaming, no doubt. If she awakens now by herself it is well and good. But should it take the world to awaken her, the sooner the task is done the better and easier it will be for all parties concerned.

Here undoubtedly the most controversial point has been touched. Immediately after the last World War many writers, mostly American, made the statement that "Japan is the Germany of Asia." This statement was made with evidence based on facts. Yet it also served well the purpose of appealing to emotion because the antipathy against Germany was then still very strong in America as well as everywhere else except in Germany and her allied nations. As

time went on, however, the statement lost its force and thus gradually faded away.

Meanwhile Japanese statesmen in Japan and Japanese diplomats and publicists abroad made protestations to the effect that Japan was not guilty of Germanic sort of imperialism and militarism. These protestations were mostly bitter in tone. At any rate there is a history to the protestations. At the beginning they were absolute denials.

But even the Japanese, with all their cleverness, could not do away, or even explain away, the facts. They next took the form of a compromise, of the admission of the guilt and a promise of repentance. Of course the denial of facts at first is openly falsehood. But in the Japanese case the promise of repentance is also falsehood. Japanese promise is no promise, not only because it has never been kept in the history of the Japanese Empire, but more because it is always intended only for getting around some momentary difficulty when driven to the corner. And it is noteworthy that Japanese always try at first to deny the facts, then to admit them and promise to reform, but they never carry out the promise of reform.

While the official Japanese followed the above-mentioned trend of argument in regard to the American comparison of Japan to Germany, the "unofficial" spokesmen for Japan presented other arguments mostly in the form of challenge. These arguments are: "The Japanese Empire is not the only nation imperialistic and militaristic." "Since every power is so, Japan can not afford to be otherwise." "If Japan is imperialistic and militaristic, she is so because she learned from the occidental nations." "Japan's imperialism and militarism are justified because they are the very qualities of Japan that made her one among the powers and saved the Orient from the iron hands of the Caucasian race." These arguments have been presented in various forms. Sometimes it took lengthy articles and pamphlets and even voluminous books to present, openly or covertly, one or several of these arguments. They intended to silence others by saying "You are another."

But challenge is never an argument. In the first place, it is admission of guilt. Secondly, two wrongs do not make one right, as two negatives make one positive in algebraic equations. Thirdly, there is no nation on earth to-day that is as imperialistic as Japan, and therefore the Japanese challenge would not go as challenge. Fourthly, it was never quite true, and is still less true to-day, that the occidental nations or the Caucasian race are pirates and robbers; and therefore there was really not so much danger of their devouring the Orient as the Japanese publicists try to impress upon our minds. Further, if Japan did save the Orient from the Occident, she did it for

herself, not for the orientals in general. Lately the argument of struggle—that in the world of struggle for existence Japan had to struggle for her existence—is no reason for her to be imperialistic and militaristic. Germany used that very same reason to justify her actions. But she hanged herself with her own rope.

The most striking fact here is that the "unofficial" spokesmen for Japan are so clever that they even at times mimic criticizing the policies of the Japanese Empire openly while they are really arguing for them covertly. And equally striking is the fact that these men are official in so far as they are paid for what they say and do but unofficial in the sense that they do not carry with them the official titles, and they are absolutely free to say almost anything while the official Japan reaps fruits from the things that these "unofficial" officials say and do if they are good: it never assumes the responsibility for them if they are not good. Therefore the scheme is doubly "double dealing."

The latest form of the Japanese argument against the accusation and proof that Japan is the Germany of Asia is that Japan, once the most ardent student of Germany, has lately changed her course because she learned the lesson from the fall of Kaiserian Germany. Then, too, the supposed proof is supplied from the facts of agitation of Japanese people for universal suffrage. But the theory is not even plausible. The fact that Japanese people agitate for universal suffrage has no bearing whatever upon the fact that Japan, as an empire, is imperialistic militarism: even that much of the growing liberalism in Japan is not as yet any more than mere agitation. It may not become an established fact: that is, the universal suffrage may not be granted for some time to come, even if it does not show in the least the growth of the same in imperial policies. It is true that the Japanese people want to free themselves from the absolutistic Government which they now have. But it is not likely that they will, when they are free, do anything for the imperial subjects other than for themselves. Often in history is shown that the mass of the people when freed from slavery are the worst masters over those who become their slaves. There is a Korean proverb, homely perhaps, but a truism, nevertheless, that "When a slave becomes a master he flogs his slave with sword."

And it is not at all a proven fact that Japan has really learned a lesson from the fall of Germany, although it is admitted that the Japanese are quick and keen imitators. But never has it occurred in history that an imperialistic nation threw away its imperalism because it saw the shortcomings of another nation possessing similar traits. However, if we could learn from the experience of others, there would be much less trouble in this world than there really is.

If Germany had learned a lesson from the tragedy of Napoleon, she would not have had to suffer what she is suffering now. In short, human beings individually or nationally learn very little from their own past experience and much less from the experience of others. Furthermore, repentance never comes in the midst of material success, but it comes deeply, and to say always after suffering. And Japan is materially successful now. It would not be a small surprise if Japan could reform herself before she takes the final lesson of pangs and pains. At any rate, aside from all this theoretical speculation, there are facts of the Japanese imperialism. Japanese policies in Korea, about China, about Siberia, and of the peaceful penetration upon the Pacific and into the American Continents, which show no change. Nor, indeed, has there been great change in her policies. The only difference is the change of getting worse. She wants to put her finger into everything; she lays hold on everything that comes in her way. So it does not appear as though she is trying to swallow the whole world at a single bite. And we know that there is very little difference between appearances and reality in any case, and especially little in Japan's case.

None of the Japanese arguments, therefore, against the fit comparison of Japan to Germany washed off the dirt from the face of the Japanese Empire—the stained mark shows even through her angelic mask. Facts are the strongest arguments of all. And the original comparison of Japan to Germany was based on facts; it is still kept alive by facts. The mere contentions of the Japanese did no good in the attempt of hiding facts. And what were the facts? They are the facts of the imperial history of Japan; what she did and does in Korea, in China, in Siberia, in America, and wherever else her children have been sent.

The parallel that runs between Japan and Germany is not a mere accident, nor is it merely superficial. Japan purposely copies everything from Germany and did the work thoroughly. From the largest structures to the minutest details the Japanese institutions are the nearest to perfect copies from the German; Japanese political and diplomatic tactics are after the German. Neither any photographic reproduction nor any reincarnated self, if there be such a thing, can be truer to the original or to the first self than Japan is to Germany.

In the earliest period of the history of the modern Japan the country was opened up to the outside world by America, after the historical expedition of Commodore Perry during the middle of last century. Then Japan was about to copy the anglo-American institutions. If she had carried out that plan she might have made perfect copies of democratic institutions; she undoubtedly would have attained the equal perfection in that case that she has achieved in her imitation of Germany, since, although she may really be, as she is often accused

to be, lacking in originality, there is not the slightest doubt of her ability to learn with rapidity and to transcribe with exactness what others have already accomplished. And if she had learned the ways of anglo-American life and institutions it would have been a blessing to Japan in the long run. But she turned to Germany for her model and instructor. From the instruction so received Japan has become what she is. She is materially successful—so far. There is the unsolved question: How long will that success remain success?

About the time when Japan was to make herself the student under the more liberal nations of the western world, namely England, and particularly America, Germany lured her away. The first educational system of Japan was modeled by American missionaries and after the American fashion. Then Ito, the maker of modern Japan, suddenly switched the whole nation off to Germany. Ito himself was a personal admirer of Bismarck, then the greatest figure in world politics. The tremendous victory of Germany over France in the Franco-Prussian War fascinated the warlike people of Japan. The wonderful scientific achievements of Germany were added to that admiration. And the trend of German thought, which has some connection with the oriental way of thinking, appealed to the Japanese taste more fascinatingly than did British thought. Then, too, Japanese were afraid of England because English influence had been strongly felt in the Japanese politics, and the Japanese patriotism could not tolerate it. As a power America did not then, to Japanese eyes, appear to be of much account. And democratic institutions were all so strange to Japanese who had lived for thousands of years under a monarchical form of government that they seemed almost immoral. For these various reasons Japan went purposely to Germany to get instructions. There she proved herself to be the most efficient pupil which Germany ever had.

So the Japanese constitution is hardly anything more than a direct translation of the German constitution; the whole administrative body of the Japanese Government was modeled after the German system. So was the naval and military organization; so was the entire educational system. And none of these aspects have been changed since the last war. The Mikado's divine right is still held almighty. The Diet has no actual power as a legislative body and can be dissolved any time by the order of Heaven-Emperor, who is responsible to no one except to the military clique, which is the real ruling body; the military party can make and unmake the cabinet at will.

There is now talk of simplifying the educational system in Japan. But the only visible change so far effected is the rigorous physical training in the public schools as a partial substitution for the con-

scriptive service. Thus in the end all this talk about Japan's divergence from Germanic ideals and dreams is but mere profession.

Just as Japan has made no change in the internal politics, so she has made none in her imperial politics. Of course, Japan has by the outside world repeatedly been caught on the spot in deeds of robbery and slaughter. All which deeds were committed in the remote corners of eastern Asia. In most cases Japan committed them with the idea that since they were done in the dark corners while the outside world was too busy with something else to be looking into affairs in such remote regions, she would be able to deceive and hide these deeds from the world. Yet truths did leak out in spite of the fact that Japan did her best to suppress such news and keep it from reaching the other half of the world. When first exposed she claimed that the reports were entirely untrue; but when she found herself unable to cover up the facts, she admitted them at least in part, although unwillingly, and in most cases promised to right the wrongs perpetrated. These promises she never carried out. As yet no change has been made by Japan in her imperial policies. She made promises to Koreans and to the entire world that she would bring out reform measures in Korea, and she went even so far as to proclaim that she had instituted and carried out in good part such reform measures. But she has not yet done a thing in that direction. Japan promised repeatedly to the world that she would promptly get out of Manchuria and Siberia. She has not yet done so, and probably, of her own accord, never will. In our time she will not unless compelled by force.

There are then the Japanese colonial policies that are closely akin to the imperial policies. These policies are also copied from Germany. While in those regions where Japan can exercise military control the Imperial Government sends the military and officials to become the ruling factors to those parts of the world where she can not enjoy military control, Japan sends the immigrants to colonize, and thus secure economic control for the Imperial Government. Before leaving Japan these colonizers are formed into a military organization, and the military structure is maintained while living in the foreign country to which they migrate. Direct connection between the Tokyo Government and the distant colonies is always kept intact. Japan uses as assistants Buddhist missions and diplomatic posts, such as those of ambassadors and consulates. The Japanese are very remarkable in their birth rate, and they believe that in time Japanese people will be able to replace the entire world population. Japan knows the history of Spain and Great Britain as colonizers. She has the same ambition, only on a larger scale. This is the so-called policy of peaceful penetration. In this policy we do not see any change made since the close of the last war.

Of course, if Japan will change her line of conduct by real action and not by mere words, as her best friends advise, she will not have to face the consequences that befell Germany. Such wisdom and courage is hard to expect from Japan or any other nation while crowned with seeming success. As yet there is no sign that Japan is really changing her course. Further, it is true that since every system, political, industrial, economical, educational, and all else, has been remodeled into German form, a sudden change of everything would cause the greatest disaster, because it would throw Japan into a chaotic situation.

Japan dares not even if she would. It took her more than a half century to complete the copying. A half century's work can not be undone in a day. So Japan is at the crossing. She feared the tragic results of the German Empire; but she also feared to start radical changes. And, too, there is a pro-German element in Japan, professional militarists, whose power and influence is too strong for the thinking public to handle. Meanwhile, as time goes on, Germany is rapidly reviving from her war wounds, and that is reinforcement to the pro-German attitude of the military class. Thus the possibility of reaping the similar result as Germany gradually fades away. The real fear that rose in 1919 did not last very long; Japanese sentiment has set itself back to the old system of the Germans. Of course, the Germany of to-day is no longer the same Germany as that of the Kaiser; and the new argument for the old pro-Germanism in Japan is not at all tenable. Yet it works as far as Japanese sentiment goes.

MEXICO.

Estimate of the Military Situation.

Source: Military Intelligence Division.

I. MILITARY.

9 June, 1922.

1. *Strength.*—

	Present strength.	Trained reserves.	Military man power.
Regular army (estimated)	78,300	.....	78,300
Trained reserves (estimated)	.....	50,000	50,000
Untrained reserves (estimated)	.....	.....	750,000

The Mexican Army is in progress of a gradual reduction pursuant to a plan put in operation by President Obregon in July, 1921. Ultimately, the strength is to be 50,000 officers and men. Due to the reduction of the army and to the revolutionary disturbances in

the past few years, there are a large number of men not in the army who have had military experience. Service is voluntary.

2. *Organization.*—The Mexican Army comprises 50 battalions of infantry, 1 additional special battalion composed of field and subordinate officers, and a special irregular unit known as the Mendoza Division. Battalions vary in strength, usually between 250 and 400 men. Four regiments of artillery of two battalions (called groups of batteries) of two batteries of four guns each. Eighty-two regiments of cavalry of four troops and staff; average strength of regiments, 35 to 40 officers, and a special irregular unit known as the Mendoza Division.

The Mexican Army has no system of field communication; however, plans are on foot to rectify this fault.

Chemical-warfare organization is in its infancy. Experiments are being conducted in the laboratory of the military manufacturing plants on the preparation of asphyxiating gases by the plant "La Gobernadora." Gas bombs have recently been made for the aviation service.

The medical corps consists of approximately 991 officers, 51 auxiliary civilian doctors, and 1,478 men. The personnel has in its charge 22 military hospitals, 14 infirmaries, and 12 sanitary relief stations.

Machine-gun organizations have been absorbed into the battalions or infantry and regiments of cavalry. Exact distribution not known. The available serviceable machine guns are served by artillery personnel.

A division of aviation under the direction of General Salinas has been created as a part of the department of war and navy. Aviation section of the war department is in danger of having to cease functioning because of lack of funds, the department of hacienda having failed to make any appropriation for its upkeep.

The department of communications and public works created last year a new bureau known as the Technical Aviation Department for the purpose of studying aviation. Plans drawn up for the reorganization of the national air force contemplate the establishment of two schools of military aeronautics to supersede the old military aviation school. The best obtainable information on personnel is 50 trained aviators, 500 known to be employed in aircraft industry in Mexico. Whether any portion of this number is enlisted personnel has not been determined, but a reliable report indicates that if a new appropriation for the aeronautical industry is not made 500 workmen would be thrown out of employment.

The largest unit provided for that corresponds to United States tables of organizations is the regiment of cavalry. Divisions are spoken of but are not complete organizations.

The " division " (infantry or cavalry) is in theory based upon three brigades of the corresponding arm, each brigade being similarly

based in theory upon either two or three battalions (infantry) or regiments (cavalry). There does not appear to be as yet, even in theory, any definite or adequate allotment to the "division" or artillery or other auxiliary or special units. No personnel adequately trained for command or staff duties incident to the handling of divisions or even brigades in modern war is believed to exist in Mexico, nor is it believed that such personnel could quickly be developed. In practice the term "division" is now used to designate the collection of troops included within the jurisdiction of the commander (normally a "general of division") of any one of the territorial "zones" into which a large part of the Republic is divided. Heretofore there has been no uniform composition or strength of forces pertaining to these divisions.

3. *Equipment.*—Infantry: German, Austrian, Spanish, and Japanese Mauser 7 mm., Winchester 30-30, and a few Remington rifles with one to four belts of ammunition, sometimes one blanket, and usually nothing else. Cavalry: Mauser 7 mm., and Winchester 30-30 carbine, a few Savage and other sporting rifles. Artillery: 75 mm. field and mountain guns and a few others of various calibers.

The machine guns are of various makes and models, the majority of which are Hotchkiss, Colt, and "Rex," or "Rexar." The Rexar guns were obtained under the Huerta régime. Few are believed to be working satisfactorily. Efforts have recently been made to interest the Government with Browning, Lewis, and foreign-make guns.

Equipment is deficient. Virtually all weapons, except the 10,000 new rifles received from Japan in December–January, 1919–20, are worn out, as is the artillery.

Twenty-two airplanes manufactured in Italy are reported purchased in Italy by the Mexican Government, as well as three Morane Saulnier of French make; all of which material is understood to have reached Vera Cruz.

It is also reported that 200 Fokker airplanes, without motors, are being purchased in Brussels and Berlin for the Mexican Air Service.

Summarized, the present serviceable aeronautical equipment of Mexico is, according to the best information obtainable, 52 military aircraft of various types.

4. *Mobilization.*—Of Mexico's 15,000,000 inhabitants 10 per cent of the population (1,500,000) would be a rough estimate of the military man power of the country between the ages of 20 and 45 years. This, however, includes diseased, uncivilized Indians, cripples, etc., and deduction must be made which would reduce this figure to approximately 1,000,000 men. A further reduction must be made for the number of men required on the farms, industries, arsenals, etc., which would bring this number to approximately 750,000. The mobilization of any appreciable percentage of this number would be slow and in-

efficient due to absence of plans, deficiencies in transportation, and lack of arms and equipment. While the existing constitution contemplates universal service, no law has been passed to make this provision effective. Actually the methods employed would probably be the same that have always been in vogue in Mexico, i. e., voluntary enlistment coupled with various forms of impressment.

Neither mobilization nor concentration points have been designated nor is there any general plan for replacement. Assuming that such points had been decided upon, the fact remains that the Mexican Army is dependent upon the railroads for transportation and supplies. The engines are mostly oil burners and with the seizure of the Tampico oil fields and the Sabinas coal fields, the railroads would be dependent upon the storage of such fuel in the interior. Such fuel is limited, and at the present rate of consumption the supply in the interior it is estimated would only last from six weeks to two months.

5. *Theory of combat.*—The development of the Mexican Army has not progressed with a view of carrying on successful warfare against an external enemy but rather the perfection of a force for keeping down banditry and internal disorders. The wonderful vitality of the individual Mexican soldier is shown in his ability to withstand hardships and exposure. Collectively, a running fight is more in keeping with the Mexican character than a stubborn effort involving heavy losses. Close liaison between units is not to be expected. Guerrilla warfare, in which the Mexican excels, would be a certainty. The greatest efforts would be against the lines of communication of the invading force. Due to the illiteracy and low average intelligence of officers and men, the great difficulty of transportation and supply, it would be difficult if not impossible to convert the Mexican Army into an efficient fighting machine.

6. *Distribution.*—(a) *Normal distribution.*—Under the reorganization scheme the country will be divided into five districts, each commanded by a general officer. The normal distribution of troops in Mexico is governed by internal rather than external conditions. It so happens that distribution is such as to facilitate concentration at points near railroads and cities, which dominate possible lines of invasion. It is estimated that there are about 25,000 troops in the northern States; nearly one-third of this number is in Sonora and includes about 1,500 Yaquis. The best troops may be found in the Tampico oil fields, where a regular standard of discipline is required and troops are paid regularly. In many cases troops are distributed with a view to lessening the danger of a successful revolt by a part of the army rather than the necessity of controlling the civil population. For this reason the majority of the troops in and near Mexico City are under a commander whose material interests are dependent upon the continuance in power of the existing Government.

(b) *Present distribution.*—Troops in northern States have been reinforced, probably by 1,000 to 2,000 men, to prevent the organization of revolutionary bands. In the Tampico oil fields a comparatively large force is maintained due to the unemployment in the oil fields.

The socialistic tendencies of the people of Yucatan have caused the military forces in that State to be increased.

7. *Efficiency and morale.*—Discipline is poor; morale poor; training very deficient.

Most of the officers and all of the men are untrained in a military sense and entirely ignorant of modern methods. They are experts in guerilla warfare.

II. NAVAL.

8. *Strength.*—The authorized personnel is 349 officers and 1,758 men, including students and personnel of arsenals and schools. The authorized strength of the marines is 26 officers and 490 men.

9. *Organization and armament.*—The navy consists of gunboats, 4; transports, 2; despatch boats, 7; school ship, 1; launches, 8; pilot boat, 1; tugs, 3; river steamers, 3; total, 29. Six additional boats (trawler type) have recently been purchased from England. With the exception of the boats recently purchased the ships of the Mexican Navy are old, poorly cared for, and require many repairs.

10. *Distribution.*—The Gulf fleet consists of 15 ships: Pacific fleet, 3; Southern fleet, 11.

Vera Cruz has arsenal, shipyard, floating dry dock (in bad condition), and torpedo station; Guaymas has an arsenal and shipyard; Quintana Roo, repair shops.

11. *Efficiency and morale.*—Officers and men of the navy are of a better type than those of the army; discipline, fair; morale, fair; training, fair.

III. GEOGRAPHIC.

12. *Geographic information affecting the strategy of the country.*—Mexico, which is 767,259 square miles in area, with a population of 15,000,000—about 75 per cent of which are illiterate and semi-barbarous—lies on the southern flank of the United States along a 1,500-mile arid frontier. It is a potential base for bolshevism and for foreign nations operating against the United States. The ports of the Pacific coast, more particularly Magdalena Bay, on an approximate parallel with the Hawaiian Islands, offer such bases to Japan. On the east Yucatan lies opposite Cuba across the 125-mile wide Yucatan Channel, the channel which connects the Gulf of Mexico with the Caribbean Sea. This makes of Yucatan a region of potential strategic importance through its position flanking the

interior line of communication between the United States and Panama.

By reason of her enormous natural wealth in raw materials, the retarded state of development of her human and material resources, and the excellent opportunities for commercial gain presented to foreign capital when stable domestic conditions prevail, Mexico attracts the interest of the great commercial nations. The primacy of the United States in the Western Hemisphere and the fact that Mexico alone of the Latin-American Republics borders on the United States are preponderant influences in her world relationships.

Her high plateau, comprising the greater part of her area, enjoys a salubrious climate and is adapted to occupancy by the white race, which fact is destined to play an important part in her development. A broad coastal plain on the Gulf littoral and a narrow one on the Pacific side terminate in steep, abrupt escarpments leading up to the great central plateau. The Sierra Madre Mountain range extends from northwest to southeast along the western edge and in between, while subsidiary ranges running at right angles to the main ranges make of Mexico a series of valleys separated by mountains and connected by difficult defiles.

Wagon roads in Mexico are very poor, except for occasional short stretches in the vicinity of some larger cities. In the rainy season motor, wagon, and even pack transportation is always difficult but can be negotiated. Trails over which pack animals can be taken lead to the remotest points of the country, and old Spanish highways (greatly out of repair and frequently impassable in wet weather) still connect important centers.

The network of railroads in Mexico is well laid out to serve military ends, except in Sonora and Sinaloa in the northwest and Nayarit in the west. Yucatan, Campeche, Tabasco, and Chiapas in the southeast are not connected by rail with the rest of the country. The rolling stock is inadequate and in poor condition.

Only in the Gulf coastal plain are there rivers on which water traffic is a matter of serious consideration. Of the main rivers, the Panuco, which traverses the northern oil fields, is of greatest military importance. Constant dredging keeps the channel open. There are no navigable rivers on the plateau.

13. *Present situation.*—The Mexican Federal forces, with minor exceptions, have so far remained loyal to the Government. Although discontent has been rife among the rank and file, it is reported that the more recent uprisings have been led by the higher officers disgruntled at the Government. In various executive decrees the administration has recognized this discontent and every effort has been made to appease officers in active service. The army.

always a potential factor in Mexican politics, has received a large share of the attention of the Obregon régime. The Mexican administration believes that it will continue to have the active support of the army and largely discounts the disaffections that have taken place.

No authentic information has been received concerning the new Felix Diaz movement designed to overthrow the Obregon Government, which has been extensively commented upon by the press during the past week. The printed proclamation dated April 2, 1922, issued and distributed in Mexico and in the United States shows that the Felix Diaz followers have been active only in an political sense in the State of Oaxaca. The movement appears to be led by one Gen. Mario Ferrer, who styles himself commander of the second eastern division. Ferrer issued two other proclamations under date of April 15 and May 5, in each of which Gen. Felix Diaz is recognized as military and administrative head of the revolt. Some of the signers of the proclamation of May 5 are in the field in Mexico engaged in active operation against the Federal troops, and others are living in the United States. No reports of aggressive military action of any consequence on the part of the rebels in Oaxaca have been received.

A proclamation signed by Pablo Gonzalez and Francisco Murguia, inviting civilians and military men to join the revolution against the Obregon Government, have been widely circulated in the border States especially, causing the Government alarm. The chiefs of operations in Tamaulipas, Nuevo, Leon, and Coahuila are said to exercising special vigilance against rebel excursions and outbreaks in the respective "Jefaturas."

Rebel activities in and about Vera Cruz oil fields have had an extremely disquieting effect upon the people of neighboring towns, especially in Hidalgo, and both the Federal and State troops are cooperating to keep the rebels from entering that State. A band of 200 rebels was reported at Yatipan near Huajutla, and Gen. Amansio Jonquitud is reported to have rebelled. Conditions in the oil fields around Tampico are very unsettled, and bandit raids are made daily. The Federal troops have demonstrated their ability to drive the bandits from any one camp and to maintain order in any one small locality, but they have completely failed to keep down insurrections and maintain order throughout the field. At the present time three fairly large and well-armed forces are operating in the fields, commanded by Corozabo, Lara, and Larraga. The Federal troops seem to be utterly unable to meet the forces of their rebel bandits and destroy them.

The rebel activity in the State of Tabasco, led by Gen. Carlos Green, has also caused the Mexican Government concern. The

increased activity of Gen. Green caused reinforcements to be dispatched from Vera Cruz under the personal leadership of Secretary of War and Marines Gen. Francisco Serrano. Serrano reports that conditions in the State of Tabasco have been greatly exaggerated.

14. *Future situation.*—The Obregon Government has so far been able to quell any revolutionary movement, and the strength of this Government will be determined in the future by the loyalty of the army.

CONDITIONS IN RUSSIA.

Source: Reliable.

22 June, 1922.

Economical conditions.

A former German official stated recently that with regards to the average laborer in Russia at the present time, their living conditions were in general far better than under the czaristic régime, and that the question of wages varied considerably in different places as well as the purchasing power of the wages received. Translated into German marks, the average wage in March, 1922, for unskilled labor amounted to approximately 2,000 marks per month. It is to be noted that German labor for the same period was between three and four thousand marks per month. In the cities it is possible that the average Russian laborer was able to live at about the same standard as the German. In many cities the workmen are paid in kind instead of in money, which accounts largely for the difference in standards of living between present and former times.

The factory owners are not considered as being owners of the property which they control or over which they exercise supervision. They are considered as being hired on a profit-sharing basis on which the Government takes 12 per cent of all goods manufactured. If the "owner" is able to raise the price of his product to cover the 12 per cent loss, he is in a position to very nearly break even with the manufacturer of similar articles in so-called capitalistic countries. It was stated that under the czaristic régime the average workman lived four families in a room, while the so-called bourgeoisie could maintain themselves on a much better scale. These conditions have been directly reversed under the bolshevistic régime, with the result that the workman, while not living under what would be styled luxury in other countries, is certainly as well off as the German workman. Nowadays it is the bourgeoisie who are starving.

In regards to the development of science and professional men, the doctors have been freed from State control and deal with their patients in a strictly private capacity, as in other countries. The Bolshevists are compelled more and more to rely upon the tech-

nically trained men and have gradually permitted them to increase their earnings and their scale of living. This is the result of concessions which were forced on the Bolshevists by necessity. It was stated that in Moscow and other centers it was possible at the present time to purchase many luxuries, including French perfumes and champagne, at prices not more than 20 to 30 per cent higher than now existing in Germany. The famine in certain districts in Russia was making itself felt to some extent in the cities, with the resultant increase in prices of food. In those districts outside of the famine region there was, however, sufficient food for those having money to pay for same.

Famine and relief conditions.

The work of the American Red Cross in Russia was very highly praised, and the informant conceded the organization to be all that could possibly be desired and extraordinarily efficient in its operation. He stated, however, that the fact that the organization was late in starting into Russia would mean the loss of at least 9,000,000 lives within the coming six months, which could not be charged against the A. R. A., but was due to the delay in starting the movement for the relief of Russia in the first place. He stated that the outlying places separated from the railroad had now been reached by the A. R. A.

Rail competition.

It was the informant's opinion that the railroads in Russia were not in quite such bad condition as one would be led to believe. The rails, tracks, and roadbeds were still in a condition to be serviceable for some little time to come, although extensive repairs had not been made. Locomotives had been repaired to some extent and a certain number of new locomotives had been ordered, mostly from Germany. The greatest difficulty in connection with railroad transportation in Russia lay in the fact that, except in the Bukowina districts, practically all of the Russian locomotives were wood burners. In former years the supply of wood for locomotive fuel had had approximately five years to dry out before being used. This supply having become exhausted, the present supply is freshly cut fuel and is therefore mostly green. Oil-burning locomotives are only found in the Black Sea districts and the oil-producing sections of Russia. On most of the express trains a speed of 35 kilometers per hour was obtained, which was stated to be exceptionally good under present conditions.

Remedies.

It was stated that the only possible remedy for Bolshevism was the reestablishment of normal trade throughout Europe, the breaking down of artificial political barriers, and the free exchange of food and merchandise among all of the nations. He believed that

under such circumstances a gradual return to normal economic conditions would mean of itself the downfall of such evidence of disease as Bolshevism. In regard to the conclusions from Russia, it was stated that the exploitation of oil and mines could be carried out privately if the bankers were willing to wait for some years for a return on their money. In regard to guarantees, the concessions should have public recognition by any succeeding governments if they were to exist at all. With reference to manufacturers in Russia, such investments would be a losing proposition for the next three or four years unless they could reach such a state of organization and development that the business could about break even. After several years of this, some profit might begin to show which would greatly increase with the times. No quick profit was to be expected from any investments in Russia. No investments in Russia could be guaranteed for the future unless it concerned the exploitation of the natural resources and such industries as could be classed as necessities. No guarantees whatever could be offered for industries manufacturing such articles that would be classed as luxuries, as such might be repudiated at any time. It was suggested that one of the best methods of obtaining guarantees for investments would be an understanding between the investor, the former property owner, and the Bolshevistic Government. This would assure the investor of a sort of double guarantee, as the former owners would also be in a position to make a profit on their property when such negotiations can be repudiated by any succeeding Government.

Military.

The discipline of the army was fairly good. The salutes between officers and men had been abolished; it was remarked that the uniform of a lance corporal consisted of one distinguishing mark of a red triangle on the sleeve. The same distinguishing mark in gold was worn by the commander in chief. The intermediate ranks varied in their glory. The army was well equipped, and the rations for the Russian Army were no worse than those to which this class of men had always been accustomed. The informant mentioned an example of a high commander who held a large celebration in the stable of one of his regiments. In his speech this general remarked upon the difference of the Czaristic régime and the Bolshevistic, calling attention to the fact that such a celebration had previously been celebrated with wine and beautiful women in the most luxurious palaces, whereas the troops of the revolution celebrated in their workrooms. Such propaganda was the mainstay of the army's loyalty, the informant's theory being that the loyalty of the army was almost absolutely dependent on Bolshevistic propaganda of such nature. As long as the Bolshevistic Government could point out

with scorn the mistakes made by the so-called capitalistic governments they were in a position to maintain their control of the army.

Political.

The general opinion in Russia appeared to be, from observation, that the Americans were in the most favorable position of any nation, outside of Germany, in Russian public opinion. The reason for this being, first, the work of the A. R. A., and, second, the fact that America did not support the armies of Wrangel, Denikin, and others. The English maintain an official trade commission in Moscow with full recognition. The French mission is ostensibly connected only with the relief work going on in Russia. It has been rumored that the French had other political motives in connection with this mission, but this was not proven. In general, the populace have rather an intense feeling against the French, probably very largely influenced by Bolshevistic propaganda. The feeling against the English has at times been strong amongst practically all classes of Russians, including the non-Communists. This is due to the rumors that the English Government in its support of Wrangel furnished munitions of inferior quality and insufficient to permit Wrangel to achieve any permanent success. The idea has taken hold among the populace that the English preferred to see the downfall of Russia and had only supported Wrangel under pressure of public opinion in England. The Bolshevists do not need to combat this point of view with any propaganda as it serves their purposes to permit such beliefs to exist.

In general the Bolshevists set themselves out to be champions of all oppressed nations and peoples. At the present time the French politics in regard to Germany was held up to the populace as capitalistic oppression of a defenseless people, namely, Germany. Bolshevism would persist as long as the Government was able to point out such alleged oppression as the result of capitalistic policy. The Bolshevistic Government would fall as soon as the nations of Europe were united on a common ground and with the avowed intention of reconstructing and building up the industries of all Europe, particularly central and eastern Europe. This, it was stated, was the sole means of depriving the Bolshevists of their mainstay of power.

In regard to the efforts of the communists to foster Bolshevism in Germany the ex-official declared that he had been informed in private conversation by leading communists in Russia that no hope of introducing the Bolshevistic Government in Germany would be entertained as long as the people had work and sufficient money to buy food. He stated that it was known to some of the leading German bankers and such men as Stinnes that the price of food in Germany was rapidly approaching the so-called world price. When this con-

dition occurred the German populace would not be in a position to purchase bread, and he felt that among the best-informed people a hunger revolt was certain to break out in Germany in the fall of 1922. Under such conditions the communists would have an easy time in giving this revolution the aspect of communism, a situation which under normal conditions could not be possible. He went so far as to say it was practically essential that such nations as the United States should begin to get ready a fleet of vessels to send foodstuffs for the relief of Germany in the fall.

Conclusion.

In conclusion the informant stated that it was his firm belief that this revolution could be judged very largely from a perusal of Carlyle's History of the French Revolution in regard to its beginning and end. He invited attention to the fact that even the French nobility, after their return to France after the restoration, had only one-third of their original property returned to them. He was of the opinion that a similar solution would be found in Russia in regard to the question of private property. On the whole, he felt that the situation in Russia could only persist so long as international and racial hatred in the capitalistic countries was permitted to delay the economic restoration of Europe. No opposition to the Bolshevists from the inside world could be expected as long as those conditions lasted, nor could any organization overthrow the Bolshevists by force of arms.

SPANISH NAVAL AVIATION.

7 June, 1922.

It is only within the last year that a naval aviation service has existed in the Spanish navy. As the organization is small, both in personnel and equipment, the various subheads under this subject can best be treated in one report.

Organization.—There is no separate corps of aviation in the navy. Officers of the line are detailed for this duty and for a course of instruction as pilots. There is no definite length of time for this detail, at the expiration of which they are returned to regular line duties. Enlisted men are also detailed from the regular service for instruction as pilots and mechanics. The administration is under an officer of the central general staff, which has charge of all matters pertaining to aviation, both personnel and material. The chief of this section is a commander, Capitán de Fregata L. Castro. There are as yet no fully qualified pilots. The only naval aviation station is at Barcelona, where there is an aviation field, workshops, aircraft factory, and hangars, and the old cruiser *Rio de la Plata* used as a

station ship. The division of naval aviation, consisting of the *Dédalo* (a merchant vessel converted to a depot ship, carrying balloons and hydroplanes), the *Audaz* (destroyer), and five motor launches, is also based at Barcelona. This division, as well as the shore establishment at Barcelona, is under command of Lieut. Commander (Capitán de Corbeta) P. Cardona.

Personnel—Officers.—So far but one class, consisting of nine officers (five lieutenants and four ensigns), has been detailed for instruction as pilots. These have completed their preliminary instruction in land machines at the Barcelona station and are now on board the *Dédalo* qualifying as pilots of hydroplanes. The *Dédalo*, with the division of naval aviation, is cruising along the south coast of Spain.

The instructors in the school are two Italian naval officers for hydroplanes, one Italian army officer for balloons, and two English civilians who have charge of the preliminary instruction in land machines. It is stated that another class of officers for instruction as pilots will be detailed next September.

Enlisted men.—About 20 men have been detailed to qualify as pilots. Of these, six have completed preliminary training in land machines and are now on board the *Dédalo*. The remainder are at the Barcelona station. About 12 enlisted mechanics are detailed to the ships at Barcelona, qualifying as aviation mechanics.

Among the officers aviation service is very popular and there are many applicants for this detail. This is largely due to the generous extra compensation given to aviators. It is stated that more officers can not be detailed at present owing to the shortage of personnel in the lower grades. The officers are courageous and have a fair aptitude for flying. The men are generally uneducated and slow to learn and do not make good pilots. As a rule, the Spaniards possess absolutely no mechanical ability. They neglect the essential, regular overhaul of machinery, as a result of which a large percentage of their machines are generally out of commission.

Training.—The regulations as laid down by the Ministry of Marine for training and qualification of pilots were reported in report No. 26 of March 15, 1922 (file number 906–300). Practically these regulations are not followed, as, up to the present time, the aim has been to qualify enough pilots to man the apparatus on the *Dédalo* as quickly as possible and to get the *Dédalo* ready to leave for service in Morocco. The officers and men now qualifying were given about three months' training with land machines at the Barcelona station, after which they were sent aboard the *Dédalo*, where they are now operating hydroplanes and the dirigibles. No specific course of instruction is laid out or followed, and they will be qualified as

pilots as soon as the officers in charge consider their training sufficiently advanced.

Stations.—The naval aviation establishment at Barcelona consists of the old cruiser *Río de la Plata*, the shops and hydroplane factory located on the beach just outside the entrance to the harbor, and an aviation field near the town of Prat, about 25 kilometers to the southward of the city. The commanding officer of the *Río de la Plata* is in charge of the base. The only other officer on the *Río de la Plata*, a lieutenant, is in direct charge of the shops and factory.

Ordinarily the hydroplanes in the harbor moor to buoys, but there is a large hangar, with steel framing and canvas cover, on the beach near the shops, where the planes can be hauled out by hand. They can also be hauled out at the shops for repairs. However, this can only be done in favorable weather, as the beach has no protection from the sea.

The shops contain a considerable equipment of machine tools (all of American manufacture), both for wood and metal working. They are now in process of being enlarged and equipped for the manufacture of hydroplanes as well as for their repair. Everything will be manufactured here except the engines. The plan is to manufacture two types exclusively, both made from the plans of the Savoya (Italian) planes, the patents for which have been purchased by the Spanish Navy Department. The smaller type will be a fast scouting hydroplane, equipped with two 300-horsepower Hispano-Suiza motors; the larger type will be a slower bombing plane, also equipped with two 300-horsepower Hispano-Suiza motors. The motors will be manufactured by the Hispano-Suiza Co. in Barcelona. At present the factory can construct 4 planes at one time, 2 of each type, in 40 days. When the present plans are completed, 12 planes, 6 of each type, can be built at one time. It is planned to build all the planes for the navy at this factory.

The aviation field near Prat is located about 25 kilometers south of the city, about a quarter of a mile inland from the beach. There is no communication to the field except by a road which is almost impassable. The location is said to be very unhealthy, owing to the low ground and large amount of stagnant water. This station contains several large sheds for airplanes and a large hangar for dirigible balloons. The latter has steel framing and a concrete floor; it was originally covered with canvas, but the wind has torn the canvas away, so it is planned to cover it with sheet metal. There is a large level landing field.

The station is equipped with a small repair shop, a well-fitted-out medical department, and comfortable, but small, living quarters for the officers and men under instruction.

There are at this station about 12 small Avra (British) land planes, used for preliminary instruction and training, and about 2 Martin side bombers, with Rolls-Royce motors. On a recent inspection, about half of these appeared to be out of commission.

There is no instruction in bombing, photography, or special courses for observers at the station.

The principal center of naval aviation activity is the *Dédalo*. This was one of the German merchant ships acquired by the Spanish Government during the war. Recently she was turned over to the Spanish Navy, and the work of converting her into a depot ship for aircraft has just been completed. The *Dédalo* was originally built in 1901. She is a vessel of 5,623 tons displacement, of the following dimensions: Length, 128.10 meters; beam, 16.83 meters; draft, 6.25 meters.

The forward hold of the *Dédalo* is equipped to carry 2 small dirigible balloons, which were bought in Italy. The dirigibles land directly over the hold and are stowed below without deflating them. The afterpart is designed to carry hydroplanes; at present there are 20 on board. There is no flying deck, the planes flying off from, and landing in, the water. They are hoisted from the water to the upper deck by cranes. Some are stored on deck, the others are disassembled, lowered below by an elevator in the stern, and stowed in the afterholds. The ship is equipped with a hydrogen-generating apparatus to replenish the gas supply of the dirigibles, and carries a large amount of gasoline and oil. There is also a machine shop for repair work and living quarters for officers and men of the aviation service. Newspaper photographs of the *Dédalo* are forwarded herewith.

Aviation equipment.—The following is an approximate list of the aviation apparatus at present belonging to the navy:

2 Martinside bombing planes, with two 300-horsepower Rolls-Royce motors.
12 Savoya (Italian) hydroplanes, with Fiat motors.
12 Macche (Italian) hydroplanes, with Isotta Franchini motors.
11 large flying boats, built in England, with two Rolls-Royce motors.
12 small Avras (English) land planes for training.
2 small dirigible balloons, built in Italy.

Of these, there are now on board the *Dédalo* about 20 hydroplanes, including 5 of the large flying boats and 2 small dirigible balloons. The remainder of the aircraft is at the shops under repair or at the Prat aviation field, Barcelona.

NOTE.—Since this report was written a royal decree has been issued creating a fourth section of the central general staff, which shall be in charge of a rear admiral, and which shall have cognizance over all matters pertaining to naval aviation. The decree states that as

soon as possible regulations will be issued governing the organization of this new section and its relation to the other branches of the ministry.

ATTITUDE OF UNITED STATES TOWARD EUROPE.

Source: Spanish press.

25 May, 1922.

The following translation of an editorial appearing on May 18 in El Sol, one of the leading papers of Madrid, is of interest as expressing the views which seem to be generally held in Spain regarding the attitude of the United States toward the Genoa and Hague conventions:

The refusal of the United States to participate in the conference which follows that of Genoa, to be held at The Hague or some other point in Europe, does not surprise us. The North American Republic has no great interest in the reconstruction of the economics and civilization of the European Continent, for although their war credits are involved here, their desire for world predominance, particularly in the Pacific and in America, is of much greater importance to them. The ruin of Europe, if prolonged and accentuated still more, would mean the definite elimination of Germany as a commercial competitor in South America, in Asia, and even within the United States itself, and the weakening of England as a financial and maritime power.

Thus the economic and political hegemony of North America in Central and South America would be more feasible, and the rivalry with Japan over the domination of China and other Asiatic countries might be settled by force with greater probability of success for the United States.

Moreover, it is of no interest to the United States that Europe arrives at an understanding with Russia, for if all negotiations, individual and collective, fail, the United States, with their bankers and experts (who already for two or three years have been exploring the great Muscovite prize) are ready themselves to take alone the contract of its reorganization and exploitation, perhaps paying for this with the funds now due them in Europe. The idea that the European countries (both the victorious and the vanquished) furnish the United States, by payment of their war debts, with the necessary money to acquire concessions in Russia instead of delivering this over to European capitalism is an idea of Napoleonic type, which seems to accord with the intentions of the American Republic to take no part in the European conferences.

We are at the apex of a great historic drama, perhaps too near it to be able to contemplate in its entirety its pathetic grandeur. The center of the world, which for many centuries was in Europe, is moving in two directions—toward the Orient, on account of the general awakening of Asia and because of the tendency in that direction of a considerable part of new Russia; and toward the Occident, on account of the economic and political attraction of the United States.

If Europe does not recover from the disasters of its past madness, if German industry does not manage to raise its head, and that of England does not again find markets for its products, and the economic support for her naval power therefore fails, the dominion of the world will be disputed in the coming decades between Japan and the United States in the Pacific. Are these two countries aware of the historic responsibilities which they are incurring. France, too, is assuming grave responsibilities in its efforts to bring about the failure of all international conferences.

But there is one factor which, in that silent struggle of the United States against the rehabilitation of Europe, might have considerable influence. That is Spanish America, whose existence, economy, and culture are still so interwoven with the European countries and so besieged by the great Republic. It would be an eminent historical undertaking to interest Spanish America in the destiny of Europe and bring these countries to the future European councils. And on whom devolves this mission more fittingly than on Spain? In Genoa we were not able to accomplish it. Let us hope that, after the bitter lessons of inaptitude and blindness learned there, it may be accomplished in the next conference.

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 9—1922.

15 SEPTEMBER, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 9—1922—15 SEPTEMBER, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded .
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

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MILITARY REVOLUTION IN BRAZIL.

12 July, 1922.

On July 5, 1922, between midnight and 2 a. m. a revolution broke out in two posts of the Brazilian army. These posts were the military school at Realengo, about 40 kilometers from Rio de Janeiro, and Fort Copacabana, situated on the ocean front, within the limits of the city of Rio de Janeiro.

This revolutionary outbreak is an accompanying feature of the presidential elections of this year, in which the Government candidate, Arthur Bernardes, has, by the regular constitutional processes, been declared president-elect of Brazil. The rival candidate, Senator Nilo Peçanha, a former president of Brazil, during the campaign, seeing that sentiment was decidedly against his candidacy, made the statement that he would become president "at any cost," and the press which supported Nilo has not disguised its efforts to subvert in particular the armed forces of Brazil.

As a part of the campaign, one of the most prominent features was the publication of two letters attributed to candidate Bernardes, which letters contained remarks derogatory to the armed forces of the nation.

There is little doubt that the plan for revolt was quite widespread, but for some reason or other, at the critical moment, many of the plotters refused to take action and, as stated above, only two posts revolted.

One of the prominent characters in the campaign has been Marshal Hermes de Fonseca, retired, of the Brazilian army. He is a former President of Brazil, and is now president of the Military Club of Rio de Janeiro, which is an institution that mixes in politics a great deal. The marshal himself is a man of limited mental capacity, but has been made a tool by various intriguing politicians.

A brief relation of the events leading up to the revolution is necessary for an understanding of the question.

Due to the death of the governor of the State of Pernambuco, special elections were held there last month for a successor. In the past, election time in Pernambuco has always meant an influx of bandits who have terrorized the capital city. This year the Federal Government determined not to permit such a disgraceful state of affairs to exist, and therefore increased the Federal military forces in Pernambuco, and instructed the general commanding the region to main-

tain order throughout the election and succeeding that time. This has been done, but this action has been represented by the opposition politicians to constitute interference in State affairs by the Federal Government and has been made much of.

Marshal Hermes de Fonseca, as president of the Military Club, sent a telegram to the general commanding the forces at Pernambuco, advising him not to permit his troops to be used to invade the rights of the people of that city, and expressing in the telegram a lack of confidence in the statements that the President of the Republic had made concerning the situation. This telegram was published in the daily press. Marshal Hermes de Fonseca was called upon officially to acknowledge authorship of the telegram, which he did, and he was then publicly reprimanded and placed under arrest for 24 hours. He was released on July 3, and rumor has it that he stated that he would at once head a revolution.

As stated above, at 2 a. m. on July 5, two posts revolted. The Fort Copacabana was under command of Capt. Euclydes de Fonseca, Coast Artillery, a son of Marshal Hermes de Fonseca.

The city was made aware of the revolution by the firing of the guns of the fort. So far as can be ascertained at this time, the guns were fired to seaward and did no harm. Captain de Fonseca has since stated that these were signal guns destined to announce the revolution to all the other military forces in and about Rio de Janeiro.

At daybreak on July 5 more firing was heard, which proved to be the Fort Santa Cruz, which remained loyal, firing at Fort Copacabana. The latter did not at this time return the fire. Captain de Fonseca later explained that when he heard Santa Cruz firing he thought that it, too, had revolted and was shelling the city. He was greatly astonished when he realized that his own fort was the target for Fort Santa Cruz.

After 7 a. m. there was no more firing until about 10.15 a. m., when Fort Copacabana fired several shells into the city, directed evidently at the ministry of war. The firing was good, the range was 9,500 meters, and the fire indirect, over a range of hills. The ministry was struck at the first shot; one soldier was killed and several people wounded. Other shells struck in the vicinity and killed a woman and two children, so far as is known.

The press announced about noon that the Government had thrown a cordon of loyal troops around Fort Copacabana, with the intention of isolating and later reducing it. Neutral observers went to the vicinity of Fort Copacabana at about 2 o'clock in the afternoon to reconnoiter, going by a very circuitous route in order to avoid the possibility of being held up by the Government troops. Events

showed that there was no need of such caution, for the observers' car proceeded right to the entrance of the fort without having sighted a soldier or officer of any kind. A civilian was seen entering the fort and several soldiers could be seen standing back of a low rampart of sand bags. The Brazilian flag was flying over the fort and the observers assumed that the rebels had surrendered and the revolution was over. The fort is at one end of a curved beach, 3½ miles long, which beach has been made into a boulevard, completely built up on the shore side with better-class residences. The observers then proceeded along this boulevard, but soon came across several groups of people standing on the beach and apparently much interested in the fort, which, of course, was in full sight on the promontory at the end of the beach.

Inquiry was made of one of these spectators as to whether the mutineers had given up peacefully, and the reply was that they had not surrendered at all but were still in full possession of the fort.

Shortly after this, about 3 o'clock, while the observers were still conversing with various sight-seers, the fort began firing; at first using small guns, apparently 6-pounders, or three-inch. These shots were seen to strike back on the hills in the vicinity of a tunnel which leads to the city in which tunnel, as was later ascertained, there were stationed a small body of loyal troops. Later, two 19-centimeter guns mounted in a turret were fired by the fort and the shells were seen to strike at various places among the houses built on the boulevard. It should be noted here that by advice of the chief of police, practically every house on this boulevard had been abandoned by its inmates that morning.

As the firing ceased after about half an hour, the observers proceeded down the beach and examined the damage done. This was very slight. A summer house of one residence was destroyed and one of the 19-centimeter shells had passed through a corner of another residence. Bystanders stated that one or two people had been injured by flying splinters.

Upon returning to the city, between 5 and 5.30 p. m., Fort Santa Cruz, at the entrance to the harbor was found to be firing at Copacabana and Fort Copacabana could be heard returning the fire. All firing stopped shortly after 5.30 p. m., due to darkness. It was later learned that one shot from Fort Santa Cruz hit the concrete barbette of Fort Copacabana, doing little damage, and another shell hit the hood of the 12-inch turret, also with little damage.

That evening an American, who was spending the night with friends in the Copacabana district, walked in the vicinity of Fort Copacabana. He found sentries posted by the rebel forces stationed at intervals upon a radius of two blocks from the fort. They

were all youths of 18 to 20 years and very talkative. They stated that they were equipped to hold the fort for 20 days and expected the rest of the army to join them.

No Government forces were anywhere in the locality, although several hundred had been located near the Square Malvino Reis, 1½ miles from the fort toward the city. Several shots had been fired by the fort from a 3-inch fieldpiece earlier in the afternoon, in an effort to dislodge these troops. Only slight damage had been inflicted on several houses. No firing during the night.

It should here be stated that during the day the Government forces, at the expense of great effort, had dragged 75 mm. fieldpieces to the summits of various hills located at considerable distance from Fort Copacabana. No troops were stationed anywhere near the vicinity of the fort.

To the observer, the most striking feature of the military operations was the complete lack of any intelligence system on the part of the Government troops for gaining information concerning the revolted forces. The fact that the troops were not stationed anywhere near the revolted fort may perhaps be explained by the fact that the President is known to have very strict orders that there should be no firing and no men killed unless it became absolutely necessary. When one considers, however, that the mutineers were firing with 7.5-inch guns at various points in the city, such slackness is inexcusable.

The following account is transcribed from notes made on the spot:

"July 6, shortly after 6 a. m., the smaller turret of Fort Copacabana, 7.5-inch, started firing toward the city, or it may have been at the tunnels, firing directly over the house in which I was staying.

"The battleship *Minas Geraes* came out about this time and commenced firing at Fort Copacabana. Three salvos in all were fired at a range of about 8,000 yards. The first salvo was short with considerable dispersion; the second landed on the rocks in front of the fort and the third landed on the barbette. The masonry was dished in considerably, but it is not thought any shots penetrated. From a sentry at the fort it was learned later that no effect was experienced in the fort.

"Firing by the fort at the town continued intermittently for about an hour. No firing was directed toward the *Minas Geraes*. The only explanation I can see is that in the plans for the revolution, the *Minas Geraes* was expected and counted on to join in, and it was still hoped that she would switch over. The *Minas Geraes* continued steaming back and forth with all guns trained on the fort until about 4 p. m., when she stood in the harbor.

"Government troops had by this time gathered in considerable numbers in the streets by the square Malvino Reis, which is about

1½ miles from the fort and one block from the boulevard. Visas were required to move anywhere in that locality. Soldiers talked freely and said they expected to storm the fort at 1 p. m.

"At about 9 a. m. the fort (Copacabana) hoisted a white flag. At 9.20 two navy planes stood over the fort, and a bomb was dropped from one at an elevation of about 2,000 feet. It fell into the sea close to the fort, but failed to explode. I walked up to the gate of the fort and talked to the sentry. Numerous civilians were also there. The sentry talked freely. Among other things said that early that morning about 150 soldiers and 13 officers had become dissatisfied and left the fort, but that those remaining were going to fight to the death if the Government failed to grant them the honors of war. Rather than surrender disgracefully, they would blow up the fort, etc. The gate was pathetically barricaded by a few sand bags, straw mattresses, and iron cots. A small plot of ground in front of the gate contained electric mines, traced the connection into the fort. The land side of the gate and for some distance beyond at the base of the walls was protected by two rows of barbed wire. Could see no guns near the gate except a few, about six, rifles on the wall. There had been a three-inch fieldpiece near the gate, but when the above mentioned bombardment took place, in the hurry to get to safety, the fieldpiece went over the wall into the sea.

"While talking with this sentry, the chief of staff (Government forces) with his aide (the son of the Secretary of War) came up to have a parley with the garrison. They were being conducted inside when another plane was heard overhead and the whiz of a falling bomb. The two Government officials pushed the guard over the wall into the sea, and ran for the gate and street. The bomb dropped within the fort enclosure, but not on the fort itself. Outside of shooting up a cloud of sand, no damage was done. The bomb dropped from an altitude of about 5,000 feet. The bomb itself was, I should judge, about 100 pounds. The escaping officers were not fired upon.

"From Government troops, heard that an attack was to be made on the fort at 1 p. m. I took station at a splendid point from which to view operations both by sea and land. The battleship *São Paulo* stood out of the harbor entrance about 1.30. The *Minas Geraes* and *São Paulo* then steamed individually at slow speeds back and forth from the harbor entrance to sea, one always maintaining a range of about 5,000 to 8,000 yards on the fort.

"As nothing had happened at 1 p. m. and later, it was decided to scout around. At the Malvino Reis Square, at Copacabana, considerable activity was observed in the Government forces. Obtained information from them that the attack on the fort was to take place

at 3 p. m. From what could be seen, there were not believed to be over 500 in all. A company suddenly deployed in extended order on the street from the Malvino Reis Square to the beach. Ammunition was served out, their pictures taken, and much to my surprise, heavy rifle firing commenced. This appeared to come from all directions. As this was rather an unhealthy spot for observers, I returned to my point of observation.

"From other observers here the following facts were obtained: About 1.30 p. m., approximately, thirty of the garrison of Fort Copacabana concluded that they were going to be killed anyway, and so preferred to die fighting in the open. They then straggled out of the fort along the beach until the above-mentioned encounter took place. Most of them must have been killed in the first minutes of firing, as upon reaching my observation point only eight could be seen, some firing behind new concrete works along the beach, and some behind sand piles on the beach. The firing continued until about 3.30 p. m. The number had gradually been reduced to four. These were dug in behind a sand pile. No attempt was made by the Government forces to outflank them, until the last few minutes. This would have been a very simple matter, due to the number of sand piles scattered around. A machine gun opened up on one flank at about 3.30 and fired intermittently for several seconds. This was followed by a bayonet charge of Government forces, probably about 300. No resistance was offered by the four revolutionists as they were too badly shot up. Upon arriving on the scene of action, it was heard that about 20 revolutionists had been killed and four dangerously wounded.

"About half a company of Government troops had in the meantime proceeded toward Fort Copacabana, and were seen to enter at 3.30 p. m. without opposition. After the action, other forces proceeded toward the fort. The forces guarding the tunnels proceeded toward Copacabana, and the town was placed under martial law.

"The *Minas Geraes* and *São Paulo* at about this time, 3.30 p. m., returned to their anchorage. The white flag still continued to fly over the fort.

"The telephone service to Copacabana was not prohibited to the general public until about 8 a. m. of this day. Among other points noted were the following:

"(1) The failure to prevent information from reaching the Copacabana garrison. While talking with the sentry at the gate, several civilians came up and gave information concerning the movement of Government troops.

"(2) The freedom with which the Government forces divulged their movements and intended operations."

An observer by visiting Brazilian friends residing in various parts of the city of Rio de Janeiro, which city is very much spread out, has learned of authentic instances of houses being struck in very widely different parts of the city and of a number of deaths of civilians; it is surprising that there were not more casualties among the population. It is quite probable that there were a great many wounded people whose cases have not been reported.

On July 5 both houses of the Federal Congress rushed through a resolution empowering the President to declare martial law for 30 days in the Federal district and in the State of Rio de Janeiro. The President immediately signed this resolution and decreed a state of martial law.

The other post which revolted was the military school, corresponding to our West Point Academy, located at Realengo, about 40 kilometers from Rio de Janeiro and 1 mile from Villa Militar, the headquarters of the troops stationed in this military region. In anticipation of trouble a considerable number of troops, generally estimated at 4,500, had been assembled at Villa Militar.

At Villa Militar a lieutenant at the head of a small body of enlisted men revolted. This lieutenant, at the head of his squad, entered the officers' club and loudly demanded that the officers present join the revolution or surrender to him. Failing to meet with any support he shot at point-blank range an army captain seated in the group, killing him instantly. He then called upon his soldiers to shoot the remaining officers, but the soldiers refused to obey, and were then quickly disarmed and seized, as well as the lientenant at their head. There was no further uprising at Villa Militar.

The only information which has become available as to the course of events at the military school is contained in a letter written by one of the students to a newspaper editor of Rio de Janeiro. Well-informed Brazilians believe that this letter expresses the exact truth. A translation of it therefore follows:

RIO DE JANEIRO, 7 *July, 1922.*

DEAR FRIEND:

Seeing that the Jornal do Commercio has always been sponsor for my unhappy military school, I come to beg your helpful counsel as a man experienced in life, after the sad events of the night from 4th to 5th of July, in order that I may free myself from the unhappy situation in which I now am.

I shall simply and faithfully relate the uprising of which the conscienceless-ness and perversity of a handful of officers made us victims.

We were sleeping quietly in our quarters when, at about 30 minutes after midnight, we were suddenly aroused by a few officers (our instructors), among whom were First Lieutenant Henrique Ricardo Hall and Stenio Caio de Albuquerque Lima, who, with pistols in hand, compelled us to fall in ranks, Stenio making the following statement: "My comrades—Catatte Palace has been bombarded. Dr. Epitacio Pessôa is no longer our President, but another man whom we have placed there. The commandant of this school is no longer

General Monteiro de Barros, but Colonel Xavier de Brito, who is now here, so the Army and Navy in revolt has taken charge of our country and this school must assume an attitude in face of these facts. Who will not accompany the new government? He who does not accompany us is our enemy."

Now, in front of the situation set forth by this "irresponsible," what remained for us to do; inasmuch as, according to him, a new president or dictator was in power—what could we do? If we did not follow him and were treated as enemies, what attitude were we to assume?

Still stupefied by such a sudden awakening, we allowed ourselves to be carried along without resistance, and without even knowing what we were to do, but O, what a surprise! Treacherously we were led forth to fight the whole force stationed at Villa Militar. We had been basely and cowardly deceived, as the well-aimed shots by the first regiment of mounted artillery soon caused us to see, and if it had not been for the good Providence which watched over us, we considering the way in which we came out of school, we should certainly have been converted into a shapeless mass of flesh. When we realized the trick which had been put upon us, we sought to beat a retreat, but it was too late. The same officials which had tricked us into this unseen action abandoned us in a cowardly way to our fate. We fled in such way as we could.

I hid myself in the woods, spending the rest of the 5th and 6th. At daybreak to-day (7th) I managed to reach the city, whence I am writing this begging that by means of a notice in your paper I may be advised what I shall do. My wish was to reach the school in order to share the fate of my companions, as dictated by the just character of our President, Dr. Epitacio Pessôa, but I fear being arrested before getting there, so I don't know what to do, as I don't want to be taken by force, but wish to go of my own free will, as I have no intention of becoming a deserter.

The writer knows from conversation with an officer who was at Villa Militar on this occasion that the military school was bombarded with three salvos from a battery of 75's, whereupon the white flag was immediately hoisted. The Government, following a procedure which is well recognized in this country, published widely a notice calling upon four of the highest ranking officers of the Army and Navy, who were known to be implicated in the revolution, but whose whereabouts were unknown, to surrender themselves on pain of being declared deserters, after eight days, and subjecting themselves to the pains and penalties of such action.

These four were Marshal Hermes de Fonseca, Maj. Gen. Joaquim Ignacio, Maj. Gen. Luiz Barbedo, and Vice Admiral Americo Brasilio Silvado. Marshal Hermes de Fonseca was found in hiding and placed for safe keeping aboard one of the cruisers in Rio de Janeiro harbor. General Ignacio gave himself up and has been placed in confinement on the submarine tender *Ceará*. Vice Admiral Silvado reported himself by letter to the Minister of Marine, and the question is now being taken up judicially as to whether this constitutes surrender in a legal sense. General Barbedo reported himself by letter in the same manner as Vice Admiral Silvado.

It is now believed on all sides that the entire revolutionary movement has been stamped out; there is no doubt that the disaffection

was quite widespread and that the few who revolted were deserted by those who had sworn to join them. Although ostensibly a political uprising, not a single politician has appeared in the whole affair and it is doubtful whether the connection of any one of them with the uprising will be established.

There is absolutely no question that this whole movement had its foundation in the bitter hatred on the part of the army and navy against the present administration for the appointment of civilian ministers of war and navy, an act unprecedented in the history of the Republic and which was taken as a deep insult by the armed forces. By his skilful handling of the situation, President Pessôa has undoubtedly done much to establish the prestige of the civil element of the country over the military, in accord with modern democratic ideas as exemplified in more stable governments.

BRITISH SHIPS TO ATTEND BRAZILIAN CELEBRATION.

14 July, 1922.

The Admiralty have announced that it has been decided to send the H. M. S. *Hood* and *Repulse* to Rio de Janeiro, Brazil, to represent the British Empire at the Brazilian Centenary Celebration.

The cruise of these two vessels has been made the subject of considerable political maneuvering on the part of the Government, it being cited in certain well-informed circles as a striking example of the pliability of the Government. When the question was first asked in the House of Commons, it was stated whilst thoroughly in sympathy with the idea, that it was not proposed to take any part in the celebration for economic reasons. The result was a considerable volume of influential protest. Commercial interests particularly urged the sending of large vessels as a means of sentimental strengthening of British relations with Brazil. Undoubtedly the Admiralty desired to lay the responsibility for any appropriations for such purpose upon the political missions undertaken by the Government rather than upon the maintenance of the navy. Mr. Lloyd George thereupon stated that the *Hood* and *Repulse* had been chosen for the mission, and that the cost of thus employing these ships was estimated at £50,000, and it was approved that they be sent.

BRITISH RESERVE OIL FUEL.

27 June, 1922.

The following article which appeared in the London Morning Post of 25 May, 1922, is quoted as of special interest in connection with the British governmental policy concerning reserve of oil fuel in case of war:

"MOBILITY OF THE FLEET—OIL FUEL RESERVES AND STORAGE.—(By our naval correspondent.)

"It is generally agreed nowadays, among those who give the matter thought, that a navy and army should by their sufficiency and efficiency act as a preventative against war, and if they fail to bring about that desirable end, their efficiency should be such as to bring operations to a successful conclusion as rapidly as possible, by which means suffering is reduced to a minimum compatible with a state of war, and the actual hostilities are confined within narrow limits.

"On several occasions it has been explained in these columns that the mobility of the fleet was one of the essential factors of efficiency, and that at present our fleet was seriously immobile outside European waters. The Parliamentary Secretary of the Admiralty, when introducing the navy estimates of the current year in the House of Commons, dwelt on this point, which, he said, was causing grave anxiety to the Admiralty, who, for reasons of economy, had been obliged to reduce by £500,000 the expenditure for 1922–23 on the scheme of providing oil fuel reserves at various bases abroad.

"Last Tuesday during the discussion by the house of the navy estimates the Civil Lord of the Admiralty again referred to the question of mobility. Pointing out that the safeguarding of the Empire and the policing of the ocean way depended on the efficiency of the fleet, of which mobility was one of the first essentials, Commander Eyres-Monsell said that for oil-fuel storage—a vital question for the fleet—the Government were asking, this year, for £1,007,400, which represented the lowest possible figure.

"ANALYSIS OF COST.

"The question is of such vital national and Imperial importance that the following analysis has been made of vote 10 of the navy estimates, 1922–23, which will enable readers to appreciate the situation:

Storage accommodation for oil fuel.

	Total cost.	Expended to date.	To be spent, 1922–23.	Amount still required for completion of work.
Aden	£150,000	.....	£32,400	£117,600
Ceylon	160,000	.....	50,000	110,000
Falklands	95,000	£17,000	60,000	18,000
Gibraltar	215,080	54,500	60,000	100,500
Glasgow	615,000	356,000	140,000	119,000
Hongkong	96,000	76,000	20,000	.....
Jamaica	60,000	53,000	7,000	.....
Malta	298,000	130,500	20,000	147,500
Plymouth	1,100,000	589,150	36,000	474,850
Portland	278,000	270,000	8,000	.....
Port Said	60,000	20,000	35,000	4,000
Rangoon	388,000	28,600	162,000	197,400
Sierra Leone	130,000	10,000	65,000	55,000
Singapore	805,000	109,000	300,000	397,000
Suez	110,000	.....	12,000	98,000

NOTE.—No money allocated this year for storage at Cape of Good Hope. In last year's estimates a sum of £42,000 was included, £48,000 still being necessary for completion.

"The Civil Lord explained that it was the policy of the Government to build up a reserve of oil fuel in case there was war, without depending on any mercantile reserve; he also pointed out that in places where a strategical reserve is required it would be impossible to ask any mercantile firm to lock up in tanks the big quantity of oil that would have to be locked up in that way."

REDUCED RAILWAY FARES FOR NAVAL PERSONNEL IN ENGLAND.

13 July, 1922.

The Great Western Railway Co. and the London and South-Western Railway Co. have announced the following concessions with regard to cheap traveling facilities to officers and men traveling on leave in uniform on their respective lines, coming into operation as from Friday, June 23:

(*a*) All naval ratings and marine noncommissioned officers and men in uniform traveling from stations in Plymouth or Devonport (including Saltash and Defiance Halt) to any station on these lines may obtain on Fridays and Saturdays a third class return ticket at the cost of a single fare and one-third, available for return on the following Sunday, Monday, or Tuesday.

(*b*) All officers of the Royal Navy and Royal Marines in uniform on leave may obtain a return first class ticket at the rate of a first class single and one-third, to London only, from stations in Plymouth and Devonport, available only on the days mentioned at (*a*) above.

The Admiralty and other naval authorities have displayed much interest in the above action by the railway companies, and it was due to their efforts that the above important concessions were made to the personnel of the naval establishments.

BRITISH CAPITAL SHIPS TO BE SCRAPPED.

8 July, 1922.

The following capital ships of the British Navy have been sold to shipbreaking firms for breaking up: *Commonwealth*, *Dreadnought*, *Bellerophon*, *St. Vincent*, *Inflexible*, *Hercules*, *Indomitable*, *Temeraire*.

H. M. S. *Agamemnon* has been tentatively selected for use as a target ship under the provisions of the treaty on the limitation of armament.

The Admiralty are considering the best means of disposing of the remaining capital ships to be scrapped, namely: *Superb*, *Nep-*

tune, *New Zealand*, *Lion*, *Princess Royal*, *Conqueror*, *Monarch*, *Orion*, *Agincourt*, *Australia*, *Erin*.

The Admiralty states that possibly some of these ships will be sold outright to the highest bidder, provided the purchaser will undertake to render them unserviceable for purposes of war within six months and complete the scrapping entirely within eighteen months, dating from the coming into effect of the treaty. It is doubtful whether this period is adequate for shipbreakers, and the Admiralty contemplates requiring shipbreaking firms under the provisions of the agreement, that in case the ships are not broken up in time, they will be towed out to sea and sunk. This provision is intended to take the place of furnishing a bond or guaranty to the effect that the rules of the treaty will be complied with. The Admiralty have instructed that all of the foregoing ships except the *Australia* be prepared for sale as soon as possible without awaiting actual ratification of the treaty. The Admiralty states further that the commonwealth government has been considering the question of scrapping the *Australia*.

REDUCTION OF BRITISH MARINE CORPS PERSONNEL.

30 June, 1922.

The headquarters of the Portsmouth Division of the Royal Marines announced that the number of noncommissioned officers and men to be discharged under Admiralty's order for the reduction of personnel, is 1,965, made up of 15 staff sergeants, two color sergeants, 111 sergeants, 299 corporals, 27 buglers, and 1,511 privates.

The men are divided into three categories for the purpose of selection for discharge. Those with 12 to 21 years' service are in category "A," those with 5 to 11 years in category "B," and those with under five years' service in category "C." The majority of the men for discharge are in category "B," but those with the rank of sergeant and above are principally in category "A." There are 11 staff sergeants, two color sergeants, and 31 sergeants with 21 years' service, and 43 sergeants with 20 years' service to leave the corps. Privates with 21 years' service to be discharged number 176, and with under five years' service 384.

Reengagements will not be restricted, except in cases of men whose characters have not been satisfactory, but no engagement or reengagement after completing time for pension will be authorized until further notice, apart from pensioners allowed in complement, who may reengage for the services on which they are employed subject to Admiralty approval.

STATEMENT OF LORD LEE.

8 July, 1922.

At the dinner given by the Worshipful Company of Shipwrights, on June 28, 1922, Lord Lee of Fareham gave a hint to the shipbuilders and marine engineers of the British Empire to maintain unimpaired the art and practice of their craft, for, in spite of the Washington agreement and treaties, various classes of ships would be necessary to complete the navies of the future, and the building of warships for foreign account could still proceed in this country. The First Lord of the Admiralty said quite frankly that we had not seen the last of war, and he advised naval architects and shipbuilders to persevere in their researhes and to advance in every way possible the art and craft of their calling.

ALLOWANCES FOR BRITISH FLAG OFFICERS.

30 June, 1922.

The table money of all flag officers and commodores will be reduced from 1 July, 1922, to the pre-war rates. This reduction, it is stated, has been rendered necessary by the very urgent need for economy. A limited sum is allowed to the admiralty annually, to be expended at their discretion in the following cases:

(*a*) Abnormal expenditure by flag officers in connection with official visits to foreign ports.

(*b*) Special entertainment by squadrons or ships.

Applications for grants from this fund must be made to the admiralty before the expenditure is incurred, and such application must show clearly under which heading the expenditure proposed to be incurred falls.

EMPLOYMENT OF SURPLUS OFFICERS.

29 June, 1922.

The Admiralty are directing the attention of officers voluntarily retiring, or contemplating retirement, to such opportunities as are likely to offer of civil employment. In the first place they recommend officers seeking employment at home or abroad to register their names with the appointment department of the Ministry of Labor, or at the nearest district directorate of this department. At these offices those who need advice as to future employment can consult a board of professional and business men, while a special financial advisory board is being established in London for the guidance of officers interested.

In addition, the Admiralty have published a list of appointments in the colonies, dominions, and under the Government abroad in which vacancies occur from time to time. It is pointed out that a large number of appointments in the colonial service are pensionable, officers selected for such posts serving on probation in the first instance.

General information as to all opportunities for land settlement is also supplied.

Certain schemes have been proposed for the settlement in Australia of officers of the Indian Army, numbering about 2,000, who are being compulsorily retired. South Africa is also preparing to take some of these officers. Similar schemes have been proposed and discussed in the newspapers in the other dominions, such as British Columbia, South Africa, and East Africa. Undoubtedly some of these officers will secure civil appointments in India.

These schemes find some sympathy and assistance in Government circles. A scheme recommended by the overseas settlement office has been organized in connection with South Africa. The Government of the Union of South Africa is not at present able to grant on any extensive scale advances and loans under the land settlement act, but they provide credits for the purchase of stocks, etc., and advances from the land bank on mortgages and arrange for the purchase of land on deferred payments. There also exist training farms under Government arrangements.

It is interesting to know that with reference to openings in the colonial services of the Crown, authorities have intimated that the majority of these possible openings would be in West Africa.

A representative of Australian Farms (Ltd.), a concern supported by the Victorian Government, and a representative of the British Columbian Government are now in India. They intend to make a tour with the object of explaining to the officers at various centers the respective advantages of their countries. The difference in the schemes is roughly that the Australian Farms (Ltd.) offers material help in supply stock on security, while the British Columbian motto is self-help. The South African scheme is called the Eighteen Twenty Settlers Memorial, and it is understood that already three hundred officers are applying to participate in that particular scheme.

It is now announced that the gratuities and increments of the surplus officers are to be exempt from income tax in England and India, but not allowances which may be drawn during the period in which payment of gratuity is deferred.

PROFICIENCY PAY FOR BRITISH ARMY.

20 July, 1922.

Amendments to the King's Regulations provide the following standards of professional and educational proficiency as necessary for the issue of proficiency pay to a soldier: (*a*) At least one year's service with the colors, excluding service as a boy; (*b*) certified by his commanding officer to be a thoroughly trained and efficient soldier (this qualification will include a satisfactory physical standard and special qualifications according to the arm or branch to which the soldier belongs); (*c*) the possession of a second-class certificate of education. A commanding officer will be held personally responsible for authorizing the grant of proficiency pay. It will be granted only in cases where the soldier shows energy and ability by becoming efficient in musketry, machine gunnery, signalling, range-taking, or gunlaying, or by the acquisition of such other qualifications as may be required of a thoroughly trained soldier in the arm or branch to which he belongs. A commanding officer may withdraw proficiency pay if, in his opinion, the soldier falls below the requisite standard, and may restore it if the soldier subsequently re-attains the standard. Inspections will be made from time to time under the instructions of the general officer commanding in chief to ensure that the general standards for the grant of proficiency pay are maintained at a uniform and proper level.

BRITISH POLITICAL PARTIES.

12 July, 1922.

It is not easy at the present time definitely to establish the lines between the various political parties in Great Britain. The coalition has been in power so long that it seems safe to say that it is definitely established and that it would be difficult to shake it from its present place. This seems to have been made evident during the past few days by the various efforts that have been made to defeat the Government. While there have been two or three triumphs of the opposition on small matters, they have been either in the House of Commons over some unimportant affair or else the more spectacular triumph of the antigovernment party in the House of Lords on the question of the Palestinian mandate.

The present political parties in England range from the ultra conservative, or "die hard," at one extreme, through the conservative, the conservative coalition, the conservative liberal, liberal, labor, to the communist at the other extreme. It is doubtful if either extreme has much power at the present time. The predominance of sober-minded political opinion seems to lie with the conservative

coalition and the liberal coalition, who form the large bulk of political opinion. This, however, must be considered as only a present point of view. The whole political condition in England is liable to change as contingencies arise. It is this fluent condition of politics which has caused the statements, so often made by the present Prime Minister's opponents, that his views are shifted so often. In case of a dissolution of the Government, it seems to be considered by the more thoughtful people here that a coalition, very much on the same order of the present one, will again come into power. It would seem a practical impractibility for the ultraconservatives and the ultraliberals, the labor party, and communists to form any combination which would defeat a coalition government which would be on the same basis as that now in power.

The ultraconservative point of view is that apparently held by the Duke of Northumberland and his party of so-called "die hards." It is represented principally by such papers as the Patriot, a new weekly publication, and The Morning Post. Their point of view is a strictly conservative one. They seem to look to the preservation of the British Empire on strictly old-fashioned lines and are intensely inimical to the setting off of Ireland and Egypt. This party seems to hold strongly to the Anglo-French alliance. It is by no means unfriendly to the United States and seems to show the point of view that it would be glad at the present time to admit America into any partnership with England and France.

There is in a way but a slight difference of opinion between the two branches of the coalition party, that is the moderate conservatives, and the moderate liberals. They represent the present policy of the Government, the chief leaders being the Prime Minister, Mr. Churchill, and Mr. Austin Chamberlain. Mr. Bonar Law, while generally backing up the present Government, is felt to be slightly more conservative than some of the leaders. On account of illness he has been out of politics for some time, but now shows signs of taking up active work again. Lord Balfour also represents this party in the House of Lords. While the point of view of this coalition is, naturally, first of all for the British Empire, it looks as if they would prefer a definite friendship and alliance with the United States to that of one with any other country. However, it is thought that they realize how impossible an alliance would be, and they seem anxious in every way to cultivate American friendship so that at any rate, if no alliance is possible, there should be a distinct understanding between the countries.

The next group would seem to be what are familiarly called the "wee frees," the remnants of the old liberal party. They still stand

for the old liberal ideas, and apparently put a little island government ahead of the British Empire. They seem inclined to give freedom to Ireland, Egypt, and India, and would rely upon the governing of the British Empire and the world by some such council as the League of Nations. These men include Mr. Asquith, who, on account of his age, no longer fills the place that he had once, Lord Grey, a high-minded idealist, but thought by many not to be a man of great practical ability, and Lord Robert Cecil, who is even more of an idealist and feels that the whole world should be brought around to his point of view and way of thinking. It is difficult to tell what the attitude of these men is towards America. It looks as if their whole point of view was limited by England.

Next in the scale would appear to be the labor party which, by the recent labor convention in Edinburgh, has separated itself entirely from the communist element. At this conference in Edinburgh the question came up as to whether the labor party should affiliate with the communist party and the resolution to that effect was defeated by a vote of over 3,261,000. Among the chiefs of this party are J. R. Clynes, M. P., John Hodge, and Sydney Webb. It is felt that their whole interest is in labor and that their feeling about America is more concerned with American labor than with the American Government as a whole.

The last party which might be mentioned in this connection would be the communist party. Very little is known yet as to its real political strength. While the labor party has secured a small representation in Parliament, it is doubtful if any of these men could be classed as real communists. As yet the labor party, in its representation in Parliament, does not seem to be able to have much effect upon politics. It takes part in important debates but it can not be said that it is represented with any great degree of strength or intelligence. The idea of the communist party seems to be a complete rapproachement with Russia and the international movement throughout the world.

ROYAL AUSTRALIAN NAVY.

30 June, 1922.

The following news items concerning the personnel of the Royal Australian Navy are quoted for information:

"Australia recently decided to make reductions in the number of Australian midshipmen.

"Twenty-three midshipmen of the Royal Australian Navy on January 4, 1922, reported on capital ships of the Atlantic Fleet for sea training. Seven joined the *Ramilles*, and four each joined the *Hood*, *Valiant*, *Repulse* and *Warspite*. These midshipmen were

rated a year previously and prior to their service in battleships of the Atlantic Fleet, served in destroyers of the Atlantic Fleet.

"On 14 May, 1922, five midshipmen of the Royal Australian Navy were ordered to the *Valiant* and on the same date four Royal Australian midshipmen were ordered to the *Revenge*.

"It has been learned that a draft of over 140 naval ratings, who were serving in the Australian Navy, landed at Plymouth 28 December, 1921, on completion of their period of service in the Australian Navy.

"Volunteers for the rank of lieutenant commander (N) are required for a vacancy in the Royal Australian Navy for two years' service on loan. The appointment will be first to H. M. S. *Geranium*. It is further stated that the probable employment will be in connection with surveying.

"The navigational services of junior officers of the Royal Australian Navy, taken while serving in His Majesty's ships, are required to be forwarded to the 'Advisory Education,' Royal Naval College, Greenwich, for inspection. This procedure is similar to that of contemporary officers in the royal navy."

ROYAL CANADIAN NAVY.

3 July, 1922.

On May 22, 1922, the Canadian Government's naval estimates of $1,500,000 was passed without a division, though many of the speakers strongly criticized them.

The Naval force will consist of two destroyers and four trawlers.

The Naval college is to be closed, it being explained by the Canadian Government that the cost of training to the country, namely, $12,000 per head for a three years' course, was too much. It was stated by Mr. Graham, Minister of Defense, on 17 May, 1922, that "Upon reconsideration, the Government had decided to keep in commission the torpedo boat destroyers *Patriot* and *Patrician* which were presented to the colony by the British Navy. One would be placed in the Pacific and the other in the Atlantic."

The conservative party, of which Mr. Meighen is a member, is strongly opposed to the naval reductions. His party bases its objections to the present naval policy of Canada upon the following grounds: First, that Canada's responsibility for sharing the defense of the Empire with the motherland is not being met. Secondly, that it is wholly unfair to leave the burden of naval defense on the shoulders of British taxpayers. Thirdly, that the proposals for a volunteer naval force will not produce the required efficiency

to justify the expense. It is probable that these objections will be embodied in an amendment.

The question of adequate naval defense of the colonies and dominions, and the proper share of the financial burden in maintaining such forces, which is to be borne by the respective colonies and dominions, is a matter which is receiving a certain amount of attention in the colonies and dominions themselves. Owing to the reorganization of the British Royal Navy, which became necessary and is being effected since the limitation of armaments treaty at Washington, the attention of the Admiralty has been largely absorbed by this problem. It is expected that the reorganization, maintenance, and expansion of the colonial and dominion navies will receive attention in due course. In the meantime it is expected that an effort will be made to educate the public of the United Kingdom and of the colonies and dominions concerned, with a view to a fair distribution of the financial burden which should be borne by the various colonies and dominions for the protection which it receives from the British Royal Navy.

Well-informed British naval officers prefer to abolish the colonial and dominion navies and require the colonies and dominions to bear an increased share of the financial burden of the maintenance of the British Royal Navy. They consider that this would enable them to have an equally large number of ships and a more efficient navy. The following article is quoted from the Argus, published in South Africa, which may reflect some sentiment from that locality:

CAPETOWN, *Friday.*

The Argus to-day remarks that Lord Lee's speech on Empire naval defense raises serious and vital issues. This journal reiterates its conviction that a plan of separate navies, infused with a common spirit and working on a common plan, is hopelessly impracticable on the score of cost, and should be scrapped. Since the British taxpayer can no longer maintain a high-seas fleet commensurate with the needs of the Dominions, the sensible course, the newspaper declares, is to reconsider the whole problem and make provision at joint expense for what is vital. It will be time enough when that has been done to consider what can be afforded for local schemes of varying and minor importance.

Of interest in this connection is a statement by a former Prime Minister of New Zealand "that the gift of a battle cruiser by the Royal Navy to that Dominion was rendered possible only by the pioneer work performed by the Navy League."

The "Appropriations in Aid" appearing in the naval estimates, 1922–23 indicate to what extent the colonies and dominions are assisting financially in the maintenance of the British Royal Navy. It is anticipated that the colonies and dominions will be required in the future to bear an increased part of the financial burden of the maintenace of the naval forces of the British Empire.

WIRELESS FOR SOUTH AFRICA.

20 July, 1922.

General Smuts made a statement on the wireless position in the Union House of Assembly this afternoon. The Government was, he said, in possession of three schemes, namely, those of Marconi, Elwell, and the British Post Office.

The Elwell proposal was based on the Poulsen arc system, which the British Government was abandoning. The British proposal, involving as it did a State-built and State-operated station, was open to certain objections, including difficulties of finance and of keeping the service up to date.

General Smuts then enumerated many advantages of the Marconi offer, which provided for the formation of a South African company, with a capital of a half a million sterling, of which the Marconi Company of England was prepared to subscribe four-fifths, while one-fifth was to be subscribed in South Africa. The Union Government was to nominate one director. Of the capital £400,000 would be devoted to the erection of a wireless station of the vacuum tube type, which was now recommended by the British authorities, and had already been adopted in Australia. This station would be capable of speaking with every continent, and Marconis would instal fresh patents from time to time. Marconis were not asking for a monopoly, and the Government would have the right to expropriate the company or renew its license every ten years.

The Government, General Smuts concluded, had not yet taken a final decision, but at present the arguments were strongly in favor of the Marconi offer.

BRITISH AIR-COOLED ENGINE.

11 July, 1922.

The nine-cylinder radial air-cooled engine built by the Bristol Co., and known as the "Jupiter," has recently passed the French type test, and the license to manufacture in France has been sold to the Gnome and LeRhone Co. (see p. 384 of "Flight" for July 6, 1922, and p. 8 of "Aeroplane" for July 5, 1922, forwarded under separate cover). There is great satisfaction in England that this engine has had such a marked success in France, where it is especially difficult for any foreign engine to compete successfully. This engine had previously passed the British Air Ministry type test.

The success of this engine has been fresh ammunition to the newspaper propagandists who have been urging increases in the Royal Air Force in the British commercial aviation, and in the maintenance of British home industries on an efficient production basis.

The marked features of this engine are the bolted-on aluminum head, the spiral distributor for induction passages, and the expansion compensating gear for valve clearances; as regards the bolted-on head, repeated efforts have been made by the company to obtain a satisfactory cast-on head, but this has never been accomplished on a production basis, although successfully done by the Royal Aircraft establishment at Farnborough. The Bristol Co. now claims to have a secret alloy metal which has much nearer the same expansion coefficient of aluminum than has steel, and from which they hope much better results. The Bristol Co. is developing and boosting the power of this engine for the aerial derby, which will be flown at Waddon Aerodrome, near London, on 7th August, and claim to have obtained a reliable output of 494 horsepower from this boosted engine.

The Bristol Co. is developing an engine of larger horsepower, which they will call the "Hercules," which they will rate at 800 horsepower. They are at present building along two lines, one being a double Jupiter, giving 18 cylinders in two banks of nine each, of the same size as the Jupiter, and the other being a single bank of nine cylinders of increased size. Neither of these two engines is sufficiently progressed in construction to warrant a definite prophecy of success by the company officials, but Mr. Fedden, the designer for the Bristol Co., formerly the designer for the Cosmos Engineering Co., which was absorbed by the Bristol Co., is very confident of success, and is a great enthusiast for the air-cooled principle.

LETTER OF VISCOUNT CURZON REGARDING AIR FORCE.

3 July, 1922.

Admiral Sir Percy Scott, formerly of the Royal Navy, now retired, is, and for years has been, condemning battleships and practically everything naval, with a view to putting forward aviation and all air activities. Admiral Scott has recently written a letter to the Times, decrying the Government's policy of building two battleships, and still saying that there is not sufficient money to give more to the air force.

The below quoted letter is a reply from Capt. Viscount Curzon, who, as a member of Parliament, has been very active in an attempt either to reseparate the present Royal Air Force into a naval and military wing, or to gain a pronounced increased allotment from the present air force to the naval wing.

There is a tremendous amount of propaganda going on in practically all of the daily press in favor of a material increase of appropriation to the air force and Government assistance to commercial aviation with a view, in the latter case, to supporting the aircraft industry and maintaining pilots and mechanics for a re-

serve. The Society of British Aircraft Constructors is one of the large factors behind this propaganda; the Northcliff press is the principal medium.

The letter referred to is quoted herewith:

SIR: I notice another letter from Admiral Sir Percy Scott in your issue of to-day's date. Why can not the gallant Admiral stick to facts? His latest statement is that the Admiralty are going to pay fifty million golden sovereigns for two battleships. This statement is really so absurd it hardly requires contradiction. But why these constant attempts to shake the confidence of the country in the naval staff?

Sir Percy Scott suggests that we should spend more money upon the air force. If more money were to be spent on the air force as at present organized, in the opinion of many, the money would be absolutely wasted. The Air Ministry is at present doing exactly what many administrations did for the Navy before the war. Most of the money which should go to provide pilots, observers, and machines, is used to provide enormous ground establishments. It is being allowed to organize a small Navy and Army in addition to its own air force establishment in Mesopotamia. It has been allowed to establish a staff college with no apparent liaison with the Naval and Military Staff Colleges which already exist at great cost. The position and amount of work of the branch of the air force operating with the Royal Navy is so unsatisfactory that the Secretary of State for Air has not ventured to even allude to it in the House of Commons, and when questioned on the subject refuses to give any information whatever. Meanwhile, civil aviation, which might provide a reserve of pilots and machines, languishes. The firms concerned in the production of engines and machines have either closed down or are faced with the certainty of having to do so unless something is done.

In short, the air force as at present organized by the Air Ministry, whether for offense or defense, in every branch of the service is pitifully inadequate. This is in no way the fault of the gallant officers and men who compose the force, but is solely the result of an organization which seems utterly unable to realize that in the air we are a continental power and there is no hope for us in the air unless the money is spent upon the air force in such a way as will enable it to meet the menace of a grave emergency.

Yours faithfully,

CURZON.

House of Commons, June 29.

6 July, 1922.

It was reported that Viscount Curzon took Admiral Sir Percy Scott to task severely for stating that two battleships would cost £50,000,000. In reply, Admiral Scott reduced his estimate to £20,000,000. Viscount Curzon has again challenged this, and takes advantage of every opportunity to attack the Government and the Air Ministry on the unsatisfactory condition obtaining in the air service, especially as regards the Navy and, in general, as regards the enormous expenditure on ground establishments, as represented by the top-heavy Air Ministry in London.

Viscount Curzon forcibly makes the point that operations at sea in a future war will depend on their success on close cooperation

between surface craft and aircraft. He states that aircraft will be the vital arm of the Navy, and that the Navy will not be fully prepared and at a hopeless disadvantage unless it has this arm. He states, further, that such aircraft are only arms of the Navy as a whole, and are not substitutes for capital ships and other surface craft.

To quote from Viscount Curzon's letter:

"The position at present is that the vital air arm of the Navy is being grossly neglected. The amount of actual work carried out by the wing of the Royal Air Force now operating with the Navy is almost negligible. All information which might arouse the country to the gravity of the position is refused by the Air Ministry.

"Not only is the air arm of the Navy neglected, but by strangling practically every form of aviation in the country the Air Ministry has left us powerless in the air to defend this country from air attack by a continental power. There may be a good case for a live and active Air Ministry with a single aim to develop the maximum offensive and defensive power in the air for this country, but there can be none for an Air Ministry under whose régime the present state of affairs has been brought to pass, and which wastes so large a proportion of the money it gets on huge ground establishments."

BRITISH NAVY VERSUS AIR SERVICE.

7 July, 1922.

The controversy between the British Navy and the air service, for control of the operations and development, comprising training, experimentation, and research of the naval wing of the air service, has become steadily and rapidly more intensive.

It is a subject of daily comment in all the newspapers, considerable space being devoted both to editorials and open letters. These letters are from various sources; ex-officers of the military services, manufacturers, civilians, etc. This matter has been the subject of considerable discussion recently in Parliament, and has been referred to the Imperial Council of Defense. Even more recently the Cabinet Ministers have personally assumed the leadership of the services under their direction, not only actively, but publically, both in Parliament and in public addresses to various civil organizations.

Reference was made in another report submitted by the Naval attaché to the fact that the Secretary of State for Air, while presiding at an official banquet to Chief Justice Taft, considered it necessary to leave the banquet in the middle of Mr. Taft's address in order to represent the air service during discussions in Parliament.

The newspapers report, under date of 6th July, that the Prime Minister on that day tried to placate the Parliamentary Air Committee by inviting them to send a deputation of four members to attend the meeting of the committee of Imperial Defense and place their views before that body. He intimated that the subcommittee of the committee of Imperial Defense had completed its inquiry into the question, and the report had been up for examination by the full committee.

On 6th July, Lord Lee of Fareham, First Lord of the Admiralty, in addressing the members of the 1920 Club, stated there was a class of enthusiasts which was, he thought, quite mistakenly at the present time depreciating the Navy, and who had an extreme enthusiasm for air development.

"And here," he continued, "I am most anxious not to be misunderstood. I am not referring to the legitimate and long-overdue development of the air service—and I think my own record is clear in this matter, for I have always been an enthusiast for the development of the air service—but I am referring to those wild and reckless statements which have become the occasion for journalistic stunts, and which are pervading a section of the press to-day, based on no scientific fact, but merely on a desire to be sensational. It is certain that the Admiralty and the Navy are not opposed to the development of the air service, but they are crying out for it, because the air service to the fleet has become quite as vital as the torpedo. We can not be accused of trying to hold back, but the Navy must have control over its air service. The air service is as much a portion of the fleet, and should be as much under its direct control, as the gun or the torpedo. The only complaint the Admiralty have to make against the air service is that, first, it is not developing fast enough, and, secondly, it is not under the control of the fleet. The air service should not be developed at the cost of the proved and tried weapon upon which we have had to rely in the past, and upon which we shall have to continue to rely."

Lord Lee went on to say that he wanted to make it clear that the air service, however well developed, could never be a substitute for the Navy. Food could only come safely overseas during war under the guardianship of the British Navy. If the extreme contention of the air enthusiasts was accepted—that the battleship was no good because it could be sunk by one bomb—he (Lord Lee) could only say it was not supported by any evidence of a scientific nature. If they carried that argument to its logical conclusion, no ships could float the seas during an air attack. The aircraft carrier, the cruiser, and the merchantman would all be sunk.

"I do not underestimate the value of the air service," his lordship proceeded, "but, believe me, it does not spell the end of the British

Navy. The Admiralty claims to-day that it has already discovered and embodied in a design an antidote for all these new methods of attack, whether by torpedo or by bomb. We are not in the least anxious about our position so long as we are allowed to go on with our work."

There are indications, as has been reported, that the Imperial Council of Defense will recommend additional air squadrons. Nevertheless, the agitation and discussion concerning the control of the naval wing of the air service continues to occupy much attention of the public and Parliament, and now has been carried to the Government, the Prime Minister having taken a hand, as indicated above.

From the above report, and others submitted by the Naval attaché this date, it will be seen that the intensive controversy which is being waged has now been taken to the court of last resort. The rapidity and fierceness with which this controversy has developed recently undoubtedly influenced the Admiralty in taking the action which they did, as it is probable they may have been anxious as to the action the Prime Minister might take in attempting to placate the parliamentary air committee, as referred to above.

Of special interest is the apparent attempt of the Admiralty, as indicated in Lord Lee's speech, to relegate the airplane to a position similar to that of the gun and torpedo. While this is not an acrimonious attack, it is one which is almost certain to give offense to the air service. It indicates that the Admiralty is far from admitting the air service to be anywhere near on a basis of equal importance with reference to imperial defense. This argument, advanced by Lord Lee, may have considerable influence with the public. These efforts to enlist the support of public opinion are undoubtedly affected by the appropriations which both the Admiralty and the air service will obtain now and in the future.

STRENGTH OF ROYAL AIR FORCE.

11 July, 1922.

On July 6, 1922, the Secretary of State for Air stated officially in the House of Commons that the latest available returns showed the personnel strength of the Royal Air Force to be as follows:

Qualified pilots	1,862
Observers	109
Nonflying officers	958
Other ranks	25,887

Captain Guest further stated that as regards the number of nonflying officers, the list was particularly made up of ex-warrant

officers and other specialized experts who came into the Royal Air Force during the war, and whom it had been necessary, for various reasons, to retain temporarily. He stated, further, that this number would constantly decrease in the future, and would be reduced by about 200 within the next few months, and that thereafter it would decrease steadily until it shrinks to a total of 530, which constitutes the present establishment of the nonflying list.

PARLIAMENTARY DEBATE ON AIRCRAFT CARRIERS.

11 July, 1922.

In the House of Commons, on July 6, 1922, Captain Viscount Curzon questioned the Parliamentary Secretary to the Admiralty closely on the question of aircraft carriers. He asked: (*a*) How many carriers are now in commission and in reserve; (*b*) how many ships are fitted for carrying aircraft; (*c*) whether enough machines, pilots, and observes are kept either on board or at their attached aerodromes to provide the full establishment of aircraft laid down for these ships? Mr. Amery answered that the ships now in commission are *Argus* and *Pegasus;* the ships under construction or reconstruction are *Hermes*, *Eagle*, and *Furious;* in reserve, *Ark Royal*. Seventeen battleships, four battle cruisers, and seven light cruisers are fitted with flying-off platforms.

In answering the rest of Viscount Curzon's questions, the Parliamentary Secretary used familiar parliamentary tactics in avoiding a direct answer. As regards the number of machines, he referred Viscount Curzon to a former answer given on April 12; as regards the number of pilots and observers, he stated that the number is adequate for the aircraft *actually* allocated to the navy. Viscount Curzon was persistent in demanding an answer to the part of his question regarding the number of machines, pilots, and observers, and was again referred to a past answer to a similar question, in which Mr. Amery had stated that the number they actually thought desirable had been reduced from considerations of economy. Viscount Curzon was still not satisfied and persisted, asking if the house was to understand that the navy had not got the number of machines it really required, and are the Admiralty satisfied with the position? The speaker interferred at this point, obviously to relieve Mr. Amery of the necessity of answering, and stated that the answer was contained in the last answer. Viscount Curzon was belligerent by this time, and insisted on an answer, but was overruled by the speaker, and the matter ended.

The evasive tactics represent the Admiralty's disinclination to give out information. It is generally conceded by all Admiralty officials

who will speak on the subject, and by all people interested in the Navy and its control of its own air service, that the situation relative thereto is entirely unsatisfactory to the Admiralty, and pressure is being put and maintained on the air ministry to create a stronger naval wing or, in some instances, to redivide into an army and navy wing.

BRITISH HELICOPTER STILL UNDEVELOPED.

11 July, 1922.

In the House of Commons, on 6 July, 1922, Lieutenant Commander Kenworthy asked the Secretary of State for Air whether he could make any further statement regarding the experiments on the helicoptic system of flying, and whether orders for new machines for the Royal Air Force are being held over pending the result of these experiments. Captain Guest, the Secretary of State for Air, replied that he could add nothing to his former statement regarding helicopters, which was to the effect that this machine had not passed any satisfactory trials and was still in an experimental stage. He stated, further, that no orders for new machines for the Royal Air Force were being held up pending the results of these trials.

PROPOSED AIRSHIP LINE TO INDIA.

11 July, 1922.

Continued press reports to the effect that a keen competition has been established between the Admiralty and the Air Ministry for control of the proposed airship line to India seems to be based on fact, although both the Admiralty and the Air Ministry deny this and evade the subject as much as possible. As previously reported, the airship scheme for service to India was submitted by Commander Burney, the inventor of the paravane, who has the backing of Messrs. Vickers (Ltd.), and the Shell Transport and Trading Co.; this scheme proposes to take over control of the present existing airship establishment in Great Britain which, contrary to the Air Ministry's announcement, has never been turned over to the Disposal Board and is still intact, and with the Government subsidy, the operation of a passenger, air and freight line to India. The Government subsidy is estimated to amount to approximately £4,000,000 over a period of ten years.

It has been repeatedly stated in the press that in order to gain control of this line, both the Admiralty and the Air Ministry have undertaken to supply the money from funds already available, since the Treasury Department has stated that the taxpayers could not be called on to furnish the money required as additional to the present budget. In order to obtain this money, the newspaper re-

ports state that the Admiralty is willing to forego new ship construction and that the Air Ministry is willing to forego new airplane construction, thus each would make a sacrifice in one direction in order to obtain control of the airship line.

There is no doubt that there is a basis of fact behind this, and it is pertinent to the present dissatisfaction in the Admiralty and in several advocates of a strong naval air wing. It is believed that the Admiralty desire control of this line primarily as an entering wedge in rebuilding its own air service under its immediate control; the Air Ministry realizes the strength this would have in weakening their own position as an independent force.

About a year ago the Air Ministry definitely decided to abandon airships with a view to concentrating available men and money on aeroplanes and heavier-than-air craft; continued pressure resulted in the Secretary of State for Air appointing a committee to advise him on the subject with a special view to building up a commercial airplane service which would satisfy the country's demands for defense units; this board has prepared and submitted a report but the report has not been published.

In the case of airships, the proper pressure was sufficient to prevent the Air Ministry delivering all lighter-than-air equipment to the Disposal Board and the Secretary of State recently stated that there was still carried on the air force list, 56 trained airship pilots, 21 other officers trained in airship duties, and 135 airmen trained in airship duties. Of the airmen, 83 were riggers and were now being trained as riggers of airplanes or balloons. The remaining 52 were hydrogen workers and are being trained for other Royal Air Force duties. Of the officers, some are now actually serving as airplane pilots and others are undergoing courses of instruction for employment in various Royal Air Force duties; these would nearly all be available as a nucleus for the airship operation.

BRITISH AIR POLICY.

12 July, 1922.

Mr. John Leyland, writing in the London Times, under date of July 10, 1922, makes a statement regarding the necessity of the Navy having charge of its own air service, which will be of interest to all concerned. In this connection he especially refers to the more satisfactory condition obtaining in the United States at the present time. That part of his article which refers specifically to this problem is quoted herewith:

"But, when all has been said and done to make believe that the air service can do the work of the Navy, the argument is unassailable

that the Navy ought to have, and must have, as it had, an air service of its own. No one has yet proposed to send a colonel of infantry to exercise command on the bridge of a battleship, or a subaltern with a squad to take charge of a destroyer or submarine. Yet to do these things would be little less absurd than to expect the air service to send officers who, even with some training, can be expected to do naval work efficiently. These good men can not properly serve two masters. Those who know anything of naval history or practice know well that the Navy is a profession requiring rare qualities and lifelong devotion to master its secrets. There is nothing casual or accidental about it.

"Other nations have not followed our erring footsteps, and the sooner we retrace them the better will it be for the Navy, and also for the independent air force, and likewise for the cause of true economy. I have before me the last report of the Secretary of the United States Navy, which last September took the wise course of establishing a Bureau of Aeronautics within the Navy Department on an equal footing with all the other bureaus. The Secretary refers to the bombing experiments against the ex-*Iowa* and the ex-enemy battleship, cruiser, destroyers, and submarines. Naval officers conducted the trials, but, on the invitation of the Navy Department, the Army participated, and a joint board was formed. This board reported that it had become 'imperative, as a matter of national defense, to provide for the maximum possible development of aviation in the Navy.' It recommended aircraft carriers of size and speed to act as an effective adjunct of the fleet. The Secretary added: 'It is the policy to endeavor to supply the fleet with an adequate aviation force that will be an integral part of it and ready to operate with it at any time, anywhere, or under any circumstances.'

"We have followed the Americans lately in many things, and we can not do better than to follow them in this, noting also their excellent endeavor to maintain close liaison with the sister service."

ADMIRALTY AND AIR SERVICE.

12 July, 1922.

In a recent article the Naval and Military Record records the general satisfaction felt among the people in general, and especially those advocates of the Navy controlling its own air force, in the fact that recent indications point to an expenditure of more money and a development of more interest in the service and cooperation between the present Royal Air Force and the Navy.

It is especially remarked that the Admiralty is spending £300,000 on refitting H. M. S. *Furious*, with the best approved equipment for carrying, handling, and operating airplanes. As regards car-

riers in the British service, the responsibility of constructing, maintaining, and operating devolved on the Admiralty, and the flying units are placed on board by the Royal Air Force, thus making two independent commands in one ship, with the resulting problem of cooperation, although each commanding officer is responsible to a separate ministry. All expenses for the operation of carriers are paid by the Admiralty, except when these ships are called into service for Air Ministry needs, such, for instance, as transporting an air unit, with equipment, to a different field of operations, as from Malta to Palestine, in which case the Air Ministry obtains the carrier from the Admiralty on a rental basis. The large possibilities for dissatisfaction in this arrangement are obvious.

BRITISH ATTITUDE TOWARD AVIATION.

12 July, 1922.

The First Lord of the Admiralty recently stated in the House of Lords that he had been aware of the rumors in the press that the Government was to reverse its decision regarding the two capital ships sanctioned by the Washington treaty. He stated that the Government had not reconsidered its decision, nor did it intend to do so. Lord Lee went on to state that he did not want to say anything which would in any way suggest hostility or lack of sympathy to the air force or to its continued development. There was no portion of the fighting services which was more interested in the development of aircraft than the Royal Navy. It was a vital weapon of the fleet and must be developed and made use of to the utmost possible extent. His speech continued with statements decrying the attitude and statements of Admiral Sir Percy Scott. He said that Admiral Scott had not had the advantage of serving in capital ships for over 30 years and that he, the First Lord, preferred to depend on the advice of the present Board of Admiralty headed by Lord Beatty. The First Lord cited the report of a special committee of the committee of Imperial defense, which was presided over by Mr. Bonar Law, and which reported that the committee had heard no evidence adequate to support a contention that the capital ship was obsolete.

BRITISH NAVAL POLICY IN REGARD TO CAPITAL SHIPS AND AIRPLANES.

13 July, 1922.

The following is quoted from an article appearing in the Morning Post of July 13, 1922, written by the naval correspondent of that paper:

"The questions asked by the Marquess of Linlithgow in the House of Lords on Tuesday last, and the reply of Lord Lee thereto, should prove reassuring to unprejudiced students of naval affairs. The proceedings indicated that the Admiralty Naval Staff, after a searching investigation into the effect of the lessons of the war on future naval development, have adopted a definite line from which they refuse to be diverted by propaganda led by persons whose motives and actions are not beyond reproach. This insidious propaganda has been referred to in these columns previously, when the comment was made that besides clouding the issue, it is apparently deliberately aimed at shaking the confidence of the country in its naval advisers.

"No reasoned or convincing argument has been adduced by the traducers of our naval policy which should, to the smallest extent, shake the confidence of those with sufficient knowledge and experience of naval matters: but 'damnable reiteration' of opinion, unbacked by logic or by a grasp of the situation, and interspersed with inaccuracies, exaggerations, and willfully distorted facts, is unfortunately a proved psychological method of working on the feelings of ill-informed masses. Lord Lee has now nailed these inaccuracies to the mast and has officially stated, from his seat in the House of Lords, that when afforded the opportunity of convincing the Committee of Imperial Defense of the correctness of his views, the arch-propagandist would not take advantage of it. This fact, which transpired at the time, set a definite value on his opinions, which, having regard to the circumstances, was, in the eyes of well-informed people, necessarily a low one.

CAPITAL AIRSHIPS AND AIRCRAFT.

"The inquiry held last year by a subcommittee of the Committee of Imperial Defense under the presidency of Mr. Bonar Law resulted in the unanimous opinion that no evidence was available adequately to support the view that the capital ship was obsolete. At that time the propagandists claimed, in and out of season, that it was the submarine sparrow which had killed the capital ship cockrobin. To-day these same people say that it is the eagle which, with its power of swooping down from the skies, has rendered 'the capital ship as helpless as a rabbit.' They ignore the fact that in the experiments of the United States Navy and Army against the *Ostfriesland*, which they triumphantly trot out as convincing proof of their statements, that vessel was comparatively as helpless as a rabbit.

"It is not necessary to be a deep student of war to realize that a body which can neither defend itself nor act offensively against

its attackers, is inevitably doomed. The latent potentialities in submarines, mines, and aircraft call for special defense measures both passive and active. The former the *Ostfriesland* did possess to anything like the necessary degree, the latter, during the experiments, was entirely lacking. History shows that for every bane in warfare an antidote is eventually evolved.

UNCHANGED PRINCIPLES.

"It is the considered opinion not only of our own naval staff, but of responsible experts in other countries, that the advent and possibilities of the submarine and of aircraft have not rendered the traditional rôle of the capital ship—battle for the command of the surface of the sea—impossible of fulfillment. The principles of war remain unchanged, although their application, by reason of the introduction of craft which operates in elements other than on the surface of the sea, becomes increasingly difficult.

"While it can be freely admitted that the defense of these islands from air attack has assumed what may be termed a continental aspect, the fact remains that the general security of the British Empire still depends on the safety of the sea routes which link together the component parts. Further, that seapower which insures this safety is now composed of naval and aerial power combined, but both operate toward the same end, the command or control of the surface of the sea, along which pass the ships carrying the food supplies by which we exist or the reinforcements proceeding to a threatened quarter. The foundation of this edifice is the capital ship, the shield by means of which, except within a small range of the coast, the other component parts of the navy—surface, submarine, and aerial—alone can pursue their duties without fear of serious interruption.

DUST IN THE EYES OF THE PUBLIC.

"We have it on the authority of the First Lord of the Admiralty that his expert advisers are confident that they have evolved a design of capital ship which will be reasonably proof against any known or likely methods of attack. In the long history of naval architecture it has never been possible to guarantee more. We also know that the naval staff regard aircraft as an essential and vital weapon of the fleet, which must be developed and used to the utmost possible extent. For this, control by the Admiralty of the aerial arm of the navy is essential, and is being pressed for officially.

"There is, therefore, a definite naval policy based on the lessons of history, on the experiences of the late war, with full weight given to the possibilities of the future, backed by actual experiments

continually in progress in order to perfect the antidotes against new banes introduced into warfare. What constructive suggestions have the antinaval propagandists put forward as an alternative policy? None! They have contented themselves with throwing dust in the eyes of the public, who are now thoroughly confused. Possibly they pride themselves on having achieved their object!"

PERSONNEL IN THE ROYAL AIR FORCE.

Source: Secretary of State for Air.

17 July, 1922.

In reply to a question by Mr. Malone, in the House of Commons, on 12 July, 1922, requiring information as to the number of officers and men in the air force whose duties do not normally take them in the air, and the number of qualified pilots and observers whose duties did normally take them into the air, and are now actively so employed, the Secretary of State for Air stated that the number of officers whose duties do not normally take them into the air includes those belonging to the stores, chaplains', and medical branches, and number about 550, with an addition of about 70 who are medically unfit for flying duties. With regard to the men, there are 24,535 who do not normally fly. The number of officers who do fly, and who may be called on in the normal line of duty to floy, is about 2,200 exclusive of certain ex-naval warrant officers, who are employed on purely technical ground duty.

This summarizes as follows:

Officers.

Flying status	2,200
Nonflying status	620
Others	119
	2,929

(NOTE.—It will be noted that this does not check accurately with a similar statement made by Secretary of State for Air.)

Men (all ranks).

Nonflying status	24,535
Total actual strength according to statement reported in above mentioned report	25 887
Leaving flying status of	1,352

BRITISH AIRSHIP SERVICE.

19 July, 1922.

The Prime Minister has stated in the House of Commons that, as a result of several meetings of the Committee of Imperial De-

fense, it was decided, in view of the needs of economy, that no money should be expended in developing an airship service, either for commercial purposes or for establishing imperial communications. A special subcommittee is being appointed, of which Mr. Amery, the Parliamentary Secretary of the Admiralty, is chairman, to study in detail the technical aspects of Commander Burney's scheme, with a view to ascertaining if his claims were well founded and if his scheme is likely to produce airships which would be of national value in time of war. Full consideration is being given to the possibility of the employment of airships in connection with imperial air communication. The report of this committee will not be published.

It will be remembered that the Burney proposition has been before the Government for about two months now, and to date no definite action has been taken by the Government. The subject was considered by committees of the Admiralty and the Air Ministry, and some competition developed between these two departments on the question as to who should have the credit of control, each department being willing to find the money necessary out of funds available in order to gain the scheme. It seems definitely assured that both departments recommended the scheme to the Prime Minister with, however, sufficient reservations and conditions to leave the Prime Minister in an undecided state. The Prime Minister has stated, time and again, that the matter was being considered by the Committee of National Defense, but, if this committee has received it at all, it has been only within the last ten days, and no action has been taken, and when it does come to a conclusion no report will be issued, although the decision will be obvious, in the course of time, as indicated by whether or not the proposed airship line comes into existence or not.

AVIATION SITUATION IN GREAT BRITAIN.

Source: Pall Mall Gazette.

21 July, 1922.

There is quoted below, in full, an editorial from the Pall Mall Gazette of 19 July, which sums up that paper's attitude toward the aviation situation generally.

The Pall Mall Gazette has for some time conducted through its columns a propaganda in favor of the air force, but, as it states below, it does not call for the immediate need of large squadrons, but rather for money for research purposes and for enough building program to keep the factories intact.

The reference to the unfortunate departmental fight between the Admiralty and the war office is not believed to be as material a factor

as the differences between the Admiralty and the Air Ministry, because of the indifferent attitude the Air Ministry has assumed since the war toward naval aviation.

It will be noted from this article that this paper believes that the Air Ministry will supersede both the Admiralty and the Army in the first place in national defense, and as such should be left as an integral force:

The smallness of the number of fighting aeroplanes at present allotted to the Navy is exciting a good deal of comment, and we have no doubt that it will be used to the utmost as a "flesh-creeper" by those who desire to bring the air force under the control of the Admiralty.

From the talk that is going on in service circles one might imagine that a great European war was imminent, whereas, of course, there is no nation in a position to challenge us, even were there one desirous of doing so. But there is a fight going on which is entirely mischievous—the fight of the Admiralty and the war office for control of the new arm of which they are jealous. It is understood, of course, that both the navy and the army will have to have planes attached to them, but at the moment these can be reduced to a minimum.

It is, indeed, doubtful if this is the right time to embark upon any great expenditure upon plane construction. This period of immunity from war should be devoted to experimental construction, leaving our building program to a time when the science and engineering of flight have been more thoroughly mastered than they have at present.

It must not be assumed, however, that we underrate the importance of the air force. On the contrary, we hold that henceforward it should tend to become the predominent arm. It is for this reason that we shall strenuously oppose any usurpation of power over it by services which it is fated to supersede. What we really have to consider at the moment is: First, the continuance of experiment, and secondly, the training of the flying man. As for the other services, our motto must be "Hands off the air force!"

STRENGTHENING OF THE ROYAL AIR FORCE.

29 June, 1922.

It is reported on good, but not official, authority that the Committee of Imperial Defense has decided for an increase in the strength of the Royal Air Force; that certain measures providing for this increase have already been taken.

Particularly speaking, the changes recommended are stated to be:

The formation of additional squadrons for home defense and the addition of about 350 officers to the establishment. The additional squadrons will probably number eight and the gain in officers will be effected by requesting present short-service commissioned officers to extend their active service. It is further stated that the number of officers training for work with the fleet will be increased.

It is of especial interest to note that the reports specifically say that the increases will be effected without additional financial bur-

den on the Treasury, due to economy which will be made in other services. In this connection the newspapers recently created somewhat of a stir upon stating that the Admiralty had officially decided to extend money toward the augmentation of the air services by canceling contracts for light cruisers. The Admiralty, however, officially denied this.

CHILEAN AIR SERVICE.

6 July, 1922.

The present condition of the aviation service, both Army and Navy, is very poor.

A campaign is being made on the part of the Navy to separate their air force from the Air Ministry.

The following is a translation of an article on this subject which appeared in La Nacion of 2 July, 1922.

THE NECESSITY FOR REORGANIZING THE NAVAL AIR FORCE.

The organization and material of this service at present answers very poorly the needs of our national defense. It is indispensable that our Navy have this important branch of our defense under its absolute control and responsibility.

Those who command and inspect all service in relation to our aero-naval defense constitute a very important part of our naval forces. This is correct, because from a purely strategic viewpoint, in case of war, the Navy only would be responsible to the country for the dominion of the sea, for which dominion it is absolutely necessary to have an efficient air service.

This desire is, moreover, very keen because the present backwardness of the naval air force is only due to a certain indifference which the general inspection of aviation has had toward it. Such indifference must be attributed to the fact that those who are at the head of such an important branch of our national defense have not got an exact knowledge of the importance and necessities of our fleet.

In all the countries of the world, the naval and military aviation are two different units, and they are subject to the control of the Army and Navy respectively. Only in England has the air force been made independent and in a form that constitutes a third element of their defense, in consideration of local strategy—because, in view of the peculiar geographical situation of the British Isles, they need for their safety first a powerful navy and air force, and secondly, a reduced Army capable of being increased in time of war.

The geographic configuration of our country, in so far as we have imitated the English organization, has nothing in common with that of the British Isles; therefore the logical thing in matters of organization would have been for us to have followed those nations which, on account of their territorial extension and their geographic configuration, are more similar to our own territory.

As Chile has on one side the Cordillera of the Andes, and in view, moreover, of the peace and harmony and close friendship which unites us with the Argentine, the dangers which could affect our safety must necessarily come from the sea, and therefore, our Government, in considering questions of defense, must first attend to the dominion of the sea, or say, the study in time of peace of the

composition and distribution of our naval and aerial forces, which in case of conflict will assure us at all times of having control of the sea, so that we may attend to the transportation and upkeep of our Army whether it has to operate at home or abroad.

Considering the facts already put forth as to our geographical configuration, one of the countries which perhaps is most similar to our own in this respect is the United States of America, and therefore the application to our air forces of the methods put into practice by that country would be the most convenient.

This was also seen and set forth by the English commander, Mr. Travers, especially contracted for by our Government as technical adviser to the General Staff of the Navy, and as instructor to our Navy, as soon as he took our Naval Air Force in charge. This most competent chief submitted a plan on policy and organization of the Naval Aviation Corps, which, approved in all its parts by one of the late ministers of war, was not put into force in form of a supreme decree, thanks to the fact that certain influences foreign to the interests of our navy fought its being dictated. By such a proceeding they have only done an enormous damage to our naval defense; depriving our fleet of giving its air force an efficient organization.

It is not necessary to be a technecist to understand that the navy only can give an opinion on the Naval Air Service, and in case any one is in doubt in this respect I am going to cite the following principles dictated by the General Staff of the Navy of North America.

1. The air force designated to operate in naval tactics and strategy with the fleet should be organized and manned by experienced sailors.

2. The skill of the most intelligent civil or military aviator is absolutely useless for the aerial services required by the navy, as he is not in a position to appreciate the maneuvers of the different types of ships nor to understand the nautical terminology, things known only by a naval official who is familiar with life at sea, nor is he familiar with artillery observation, the usage of torpedoes, the laying of mines, or the atmospheric conditions at sea.

3. The uniting of the air service of the army and the navy is contrary to the most elementary principles of naval defense, and therefore it is indispensable that the whole idea of unity be rejected.

Now that a practical demonstration of the failure of the existing organization of all the air service has been made to the Chamber of Deputies it is time to reorganize it, giving the navy the control of everything which is in connection with air service designated to operate with the fleet in the defense of our coast and channels.

CHILEAN DEPUTY ATTACKS AIR SERVICE.

6 July, 1922.

For the past few months there have been numerous complaints and insinuations against the air force of Chile. There have also been numerous rumors as to the frauds committed by Major Scott of the Royal Air Force who was lent to Chile as a flying instructor. His contract was terminated by mutual agreement last March.

On the 30th of June, a deputy named Celis made a long speech in the Chamber of Deputies on these subjects, which has created no little excitement in governmental and political circles in Chile.

The following is a translation of the most important part of his speech:

Señor CELIS. To the aeroplanes acquired with the funds designated by law 2771 must be added the aeroplanes which were the object of the concession made by the Government of England to Chile, together with some submarines. This matter which I wish the Government would make clear once and for all is of the greatest interest.

It has been said, Mr. President, that the English Government receiving permission from the Chilean Government—and even if it had not received it, it would have done what it did—for the requisition of the two warships which our Government had building, which right of requisition was mentioned in the building contract, in compensation, I say, for the attitude of our Government, the Government of England presented to Chile 50 aeroplanes and six submarines.

Very well, Mr. President, my information differs substantially from this fact.

Although I always try to use words least uncomfortable for the rest on making my remarks, still I must say here that it seems to me that in this matter both the country and Congress have been deceived—because, according to antecedents which I have been able to investigate—as sometimes, in order to do our work, we deputies have to turn into detectives—the English Government not only acquired the ships building but also materials which the Government of Chile had over there, because the Government of Chile, in accordance with the project to increase the fleet, in 1913, had the two warships building and had acquired steel and other materials necessary for the construction of destroyers, the value of which I do not know exactly but I believe it amounted to about 200,000 pounds sterling, which materials the English Government also took.

As these materials when they were taken over by the English Government had increased four or five times in value, there existed a difference in favor of the Government of Chile which, according to my information, was not less than one million pounds sterling—and in compensation for this million pounds sterling, the English Government gave us 50 aeroplanes and six submarines when with this million pounds we could have bought 500 aeroplanes and 50 submarines.

This is my information on this matter, to which I would call the attention of the Government, and I now ask the President that he will please send the proper official request to the Minister of War for the data in relation to this matter.

Señor RIVAS VICUNA (President). The official request shall be sent in your name.

Señor CELIS. In the end, it must be said that the present which the English Government made us was a Greek one, because not one new machine came over. They were all used, and in many of them the motor had already had more than 800 hours work. In no air squadron in the world do they use machines whose motors have had 800 hours service; they throw them aside as useless, because it is considered that the motor of an aeroplane does not resist more than 800 hours running.

The machines which were received as a present from the English Government to this country, although probably there were those who knew that it was not a matter of a real present, were 12 Bristol, 8 Scout, 208 De Haviland, type 9, and 10 hydroplanes.

With the balance from law 3264, two avro school and one spad were acquired.

Lastly, with the funds dedicated by law 3633, we acquired six aeroplanes, avro school.

Respecting the fulfillment of the contract with Major Scott, to which I have already referred, I will give some data. He was paid at the end of his contract, as indemnization, a sum in pounds sterling equivalent to the formation of 10 pilots.

Señor Ruiz. Why was he given indemnization?

Señor Celis. Because the scholars were not given to him on time. So that, of the 72 pilots which he should have made, these 10 must be discounted. Besides these, 13 more pilots must be discounted, who went to him as scholars, when, as a matter of fact, on Major Scott's arrival at the school, they already had their brevet as aviators. This makes 23. He had remaining, therefore, 49 pilots, which would seem to have been paid for with the sum I have already mentioned, of 29,400 pounds sterling, or one million two hundred and some pesos of our money. Notwithstanding the total contract was only for 14,400 pounds sterling.

Of the 49 pilots whose instruction Major Scott had in charge the only results obtained were the following: The 49 learned to fly in school aeroplanes, 20 of them in war machines, and according to the journal of the Minister of War, page 171, which I have just read, none of them could use a rapid-fire gun, nor a bomb-throwing machine, nor did they know anything of aerial photography nor of the control of artillery fire, nor could they fly at a great height.

The cost, nevertheless, of each one of these pilots for this half teaching amounted to six hundred pounds sterling per head and the contract stipulated the sum of two hundred pounds per pilot with complete instruction.

And—look at it, Honorable Chamber—we have not only been exposed to these scandalous frauds, but we have daily been exposing the lives of our valiant young officials who, carried by their impetuous patriotism, have inscribed among the candidates for aviators in this establishment.

I am going to give you a small idea of the accidents—

They have caused the death of Lieutenants Bello, Mery, Ponce, Berguno, Luco; Sergeant Menardier; Lieutenants Zanartu, Espejo, Illanes and Bravo. Fourteen pilots have suffered serious injuries and fifty-four slight injuries.

How are these accidents distributed over what we might call the two periods of national aviation—the period previous to Scott and Scott's period. The Honorable Chamber will see—

Between the years 1913 and 1920, period previous to Scott, there were five deaths, four serious accidents and 26 slight ones. Between 1920 and the beginning of 1922, there were four deaths, ten serious accidents and 28 slight accidents.

The average in deaths between the two periods is five and a half times more, in serious accidents twenty times more and in slight accidents seven times more.

AMERICAN FILMS IN FAR EAST.

20 June, 1922.

In view of the anti-American propaganda already being carried on here in the Far East, and no doubt in other countries, it is greatly to be deplored that American moving picture films of a nature to show and grossly exaggerate the bad sides of American life are occasionally exhibited in the theaters here, both Russian

and Chinese. Some of the comedies shown are of a disgustingly low type. Two films, not comedies, were particularly bad. One showed an American policeman arresting a man. The policeman was a strapping man, the prisoner a weakling, who did not resist, but protested and begged. The policeman slapped him in the face several times. We have seen Chinese police do that here, and supposed they were the only ones capable of it. Now it is advertised to the Russian and Chinese public that it is quite customary with American policemen—for that is the impression gained.

The other film showed an American officer brutally mistreating a soldier, beating and kicking him and then grinding his face in the dirt with his boot, while the other soldiers looked on helpless.

How many thousands of foreigners have seen this picture and formed their ideas of the American Army from it it is difficult to say.

CONDITIONS IN CANTON.

5 June, 1922.

The Macao Riot.

The 28th of May a riot occurred in Macao, followed by the wholesale shooting by the police and military of the Portuguese colony, which resulted in a heavy casualty. It was reported that, including the shooting of the two days (28th and 29th), about 10 Chinese were killed and over 100 wounded. But no official figure has been given out yet. The Canton commissioner for foreign affairs has already delegated special officials to Macao to investigate into the matter. It is expected that an official report will be given soon. The commissioner for foreign affairs, Mr. Frank W. Lee, has already lodged official protest to the Macao Government through the Portuguese Consul in Canton urging justice must be done in the matter.

This unfortunate incident happened in a Chinese woman being molested by an Indian policeman on the street in Macao. This aroused the indignation of the Chinese passers-by, and a certain Chinese could not bear to see the woman being molested and he struck the Indian police a blow and the other onlookers joined in. The policeman promptly took two of the Chinese to the police station. By that time a big crowd had collected and later they demonstrated outside the station, demanding the release of the two prisoners. It was seen that there was likely to be trouble and armed troops were promptly called out. It is believed, as reported by the press, that in their excitement some of the troops lost their heads and instead of firing one warning volley over the crowd, several of them fired indiscriminately, quickly laying low many of the demonstrators. Some

of the dead bodies were carried away by the troops and dumped into the water. So it would be difficult just now to ascertain the exact number of dead. At the time of the incident the Governor of Macao, H. E. Senhor Correa de Silva, was in Hongkong on his way to Lisbon for a vacation. But as this happened the governor was immediately called back to Macao and obliged to cancel his home trip.

Immediately following this incident a general strike was called by the labor guilds in the Portuguese colony. Europeans as well as Chinese have since been moving out of the colony for Hongkong and Canton. The populace of Macao is practically panic-stricken.

Mass meetings of laborers and common citizens are taking place daily in Canton demanding that immediate and adequate measures be taken by the Canton Government to cope with the urgent situation. Two Canton gunboats have since been dispatched to Macao and there watching further developments.

In consequence of this incident the Macao authorities put most of the blame on the laboring class and therefore have ordered practically all the Chinese labor guilds in the colony to be closed. Most of the guilds have now moved out to Chinshan, in Chinese territory, a little distance outside the city of Macao. As the Macao laborers are all on strike, the Canton and Hongkong labor guilds are contributing large sums of money for their maintenance.

CONDITIONS IN HARBIN.

6 June, 1922.

Japanese Military Activities.

There have been a number of reports here recently to the effect that the Japanese are throwing large forces from Changchun to Nailar and North Manchuria, in preparation of a possible invasion of North Manchuria and the Chinese Eastern Railway zone by forces from the Far Eastern Republic.

These troops, it is said, are being despatched through the country and not by rail, traveling in automobile trucks at the rate of 40 trucks a day. The movement is said to be steadily continuing.

General Wada, who is in charge of the movement of Japanese troops, has arrived in Harbin.

It is also claimed that trucks are making regular trips from here to Changchum, 20 trucks going and 40 returning, but there seems to be little sign of any Japanese troops arriving in Harbin.

It is further stated that Harbin is to be made a motor-truck base, with a second base at Changchun, in order that troops may be moved quickly and not be dependent upon the Chinese Eastern Railway.

In connection with the mutiny of the Chinese troops on the eastern line of the railway, who sympathize with General Wu Pei-fu, there

has been some alarm in Harbin as to the position of the foreigners here in the event that the Wu Pei-fu troops should continue the advance west, which they had begun. The question was what protection foreigners would have.

The Japanese representative on the interallied technical board made it clearly understood, in an interview, that while his position did not entitle him to consider the question of guarding the railway, as that had been undertaken by the Chinese, that his private opinion was that the guarding of the railway could only be transferred to the Japanese troops if the consular corps insisted upon it, and with the agreement of the Japanese Government, or if circumstances forced the Japanese command, whether they wished to or not, to take upon themselves that duty.

The consular corps have, of course, not been inactive and have had a number of meetings. General Wu, the governor general of Tsitsikar, who seems to be becoming a prominent figure here, assured the consuls that there would be no danger to the lives or property of foreign residents and that order would be restored soon.

There seems to be considerable difference of opinion among the consular corps and a hesitancy to be frank and work hand in hand.

At the South Manchuria Railway I was also assured that the Japanese would not make any move in the face of possible danger to Harbin and the railway, unless urged to do so by the consuls. I was also told there that some 4,000 Chinese coolies had been recruited in Fu-Chia-Tien, the Chinese town here, for services in the ranks of the Mukden troops to the east. These coolies had received about a week's training and had been provided with rifles.

EVENTS IN CHINA AND SIBERIA.

21 June, 1922.

1. On June 8 it was announced that Wu Pei-fu had granted Chang's request for an armistice the terms of which were as follows: The withdrawal of the Manchurian troops to Chin Chow-fu, the resumption of regular train traffic, and the release of all rolling stock held by Chang. It was understood that these terms were acceptable to Chang and that he would continue his retreat and remove his soldiers from inside the wall. Instead of withdrawing, however, he rushed reinforcements inside the wall and launched a heavy surprise attack against Wu's advance guard. The failure to obey the terms of the armistice resulted in a renewal of the fighting in the vicinity of Chinwangtao. Chang's men up to this time had been retreating on the approach of Wu's advance guard and having in addition asked for a cessation of hostilities it was generally felt that

the campaign was finished. None of Chang's men were believed to be more than six miles inside the wall while a strong force of Wu's army had arrived at Peiteiho and Haiyang. Train service on the Tientsin-Moukden line was blocked at Shanhaikwan but international specials were run from Tientsin to the latter place.

2. At the opening of this battle the front line infantry trenches of the opposing forces were about 1,800 yards apart with heavy artillery one mile behind. The fighting on the ninth consisted of a heavy artillery fire from Chang's forces, shots falling about 500 yards short of Wu's artillery. Wu's artillery was just coming up and fired only a few shots. The infantry on both sides kept up a slow fire all day long. Not a single casualty on Wu's side was observed by the commanding officer, U. S. S. *Albany*, who in company with Major Lacky, United States Army, and Lieutenants Webb and West, United States Navy, spent the day in Wu's trenches. This party while observing in an open space to the right of Wu's trenches drew a heavy concentrated infantry fire from Chang's trenches for about 30 seconds but no one was hurt.

3. Both armies maintained their positions throughout the day of the 11th. Several charges by Chang's men were driven back during the course of the day and heavy infantry and artillery and machine gun fire was kept up. About 100 killed and 500 wounded were observed on Wu's side; Chang's casualties not known. General Wu entrenched a reserve line of infantry from the sea inland for about five miles and about one mile in rear of his advance artillery. It was reported by the commanding officer, U. S. S. *Albany* that Wu on this day captured three Japanese spies, also 120 prisoners.

4. The British patrol placed in Beiteiho by the British cruiser *Curlew* was withdrawn on the 11th of June after rifles had been returned to the native police. The international special was unable to proceed to Shanhaikwan on the 10th on account of the fighting in that vicinity. Two Chinese cruisers were operating off Chinwangtao and Shanhaikwan and occasionally fired into Chang's lines. The French sloop *Craonne*, the Italian crusier *Libia*, the U. S. S. *Albany*, and H. M. S. *Curlew* and *Hollyhock* were off Chinwangtao.

5. Heavy and continuous firing was kept up all day of the 12th and 13th with many casualties on Wu's side: the losses suffered by Chang are not known. At the end of the 13th Wu had driven the right of Chang's line back about 2 miles and had advanced and planted his artillery on the mountain side. Wu continued to bring up to the front all men and arms available and his men seemed very confident of an early retreat by Chang. This fighting on the 13th practically ended the engagement, as with the continued

arrival of reenforcements on Wu's side Chang ceased firing and a lull ensued, during which a conference between representatives of the two opposing sides was arranged by the commanding officers H. M. S. *Curlew* and *Albany*. On the 16th the *Curlew*, having the senior commanding officer, went to Shanhaikwan and brought to Chinwangtao General Chang's son, while Captain Richardson of the *Albany* brought off to the *Curlew* General Yang, one of Wu's generals. A peace parley took place and both sides agreed to cease battle until they could communicate with their respective chiefs. On the 17th the *Curlew* brought Governor Sun Lieh Chun of Kirin Province to Chinwangtao as Chang's representative, while Captain Richardson conducted General Wong Cheng-Pen, Wu's general commanding, from the railroad station to the *Curlew*. The delegates had full power to act and the conference closed successfully at 1.45 p. m. on the 17th. The terms of the armistice were as follows: Chang's troops to start retiring at 7 a. m. of the 18th, retirement of Chang's troops beyond the Great Wall to be completed within five days; Wu's troops not to move from the position held by them on the 17th.

6. General Chang started withdrawing immediately in accordance with the agreement. Two Chinese cruisers and three gunboats, with Admiral Soh in command, anchored in Chinwangtao on the 18th to observe the retirement of Chang's army.

7. Ex-President General Li Yuan-Hung arrived in Pekin June 11 and proceeded to his private residence where he intends to conduct the business of state. A mandate was issued appointing General Li to "act in the capacity of President pro tem pending the determination of his status by parliament." Acting Premier Chow Tze-Chi resigned, and Mr. W. W. Yen accepted the premiership. General Wu was offered the appointment of Minister of War but refused to accept it. The new Pekin Government is generally considered inefficient, headed by a weak President, but in a confidential interview General Wu stated it to be his object to unite China first and then strive for efficiency. Men are now being brought into public office with the idea of placating the different sections of the country which have long been hostile to the Pekin Government. With the cessation of fighting in the north, General Wu proposes to make his headquarters at Honanfu and observe developments from there.

8. From persistent rumors and the actual movement of troops it was certain by the 1st of June that the long-heralded southern expedition against the north had actually started. Certain Cantonese troops, under command of General Li Lieh-chun, came into possession of the lower half of Kiangsi Province and captured Kanchow, Yannan, and Kiangfu and advanced down the Kan River towards Nanchang.

9. The northern forces, under the command of General Tsai, arrived at Kiukiang on the 13th of June and took station at Nanchang to await the arrival of the southern forces there. American missionaries in Nanchang, of whom there are over a hundred, were considerably alarmed regarding the fate of that city, feeling certain that one side or the other would loot the place. Most of these missionaries were leaving Nanchang and were expected to be clear of the city by June 17. There was no sign of any antiforeign feeling and no destruction of foreign property. General Li Lieh-chun, who was in command of Sun's Kiangsi expedition, was reported seriously ill on the 11th. Papers of the 21st stated that he had died.

10. The Kwangtung troops arrived from Kweilin and Wuchow on June 4 and encamped around Canton. They declared themselves independent of any leadership, but claimed allegiance to General Chen Cheung-ming. They were orderly but undisciplined. It was these troops that informed Sun Yat-sen that he could not return to Canton, and in defiance of which Sun Yat-sen landed by boat in Canton on June 1.

11. Fighting started in Canton at 3 a. m. on the 16th, when the troops of General Chen Cheung-ming executed a coup d'etat and surrounded the presidential residence of Sun Yat-sen. After capturing several of the surrounding forts, General Chen on the 17th was in complete control of Canton and Sun Yat-sen had escaped on the Chinese cruiser *Hei Chi* at Whangpao. General Chen Cheung-ming issued a proclamation declaring himself in favor of the Pekin Government. Previously reported definite understanding between Chen Cheung-ming and Wu Pei-fu was apparently correct, and this cooperation on the part of General Chen and the overthrow of Sun Yat-sen indicates the complete lapse of the Southern Government.

12. On May 18 information was received by the American viceconsul at Canton to the effect that Wuchow had been looted. The troops doing the looting were reported to be Kwangsi troops coming toward Canton from Kweilin. There were unconfirmed rumors of acts of piracy and interference with American property in that region and the U. S. S. *Pampanga* was ordered there to investigate. On account of the continual friction between the Kwagtung and Kwangsi troops which have endangered American property, it has been necessary to keep a gunboat there.

13. Several attempts have been made to bring about a peaceful settlement between the Kwangtung and Kwangsi forces at Wuchow but without success. The Kwangsi forces refuse to give Sun Yat-sen the allegiance that he demands and the latter have therefore insisted on holding Wuchow against the wishes of the Kwangsi people. On June 11 there were about 3,500 Kwangtung troops in

Wuchow under the command of General Kwong Kwok Hung, a Sun Yat-sen supporter. The Kwangsi forces consisting of about 2,000 Kwangsi and Yunnan troops under General Lau Chun and General Wai, which had been recruited from Sun's northern expedition, are across the river from Wuchow. Besides the two forces there are about 15,000 "self-governing army," the largest force in Kwangsi, controlled by two brothers, Generals Lau Ping Ui and Lau Tak Hing.. Conditions on the West River between Wuchow and Nanning became so unsettled in the early part of May that practically all traffic between these cities has been stopped. There have been reports of acts of piracy and interference with American property. The Standard Oil Co. has been forced to temporarily discontinue their upriver trade.

14. *Hongkong.*—On Monday, 29 May, a settlement of the launchmen's strike was reached. An increase of 50 per cent in salaries of $10 per month and less, and a flat increase of $5 per month in all salaries over $10 per month was granted, the increase to date as from 1 April and all strikers to be reinstated upon application. The strike was orderly and showed that organized labor is losing its power in Hongkong. The ferries were run by the British Navy and several tugs were being operated by steamship companies with their own men.

POLITICAL CONDITIONS IN CHINA.

21 June, 1922.

1. Up to Friday night of last week, June 16, in almost all Chinese circles it was held that one of the most desired eventualities of the political situation would be the elimination of Dr. Sun Yat-sen. Several plans were suggested, among them being the possibility of Chen Cheung-ming driving Sun out of office. When the news came to Shanghai during Saturday and Sunday that Chen Cheung-ming had actually forced Sun out, the general reaction was favorable to Sun. The veteran revolutionist, Sun Hung-yi, issued a telegram, which he had sent to Chen Cheung-ming, denouncing his conduct. The Chinese reasoning was along these lines: Chen Cheung-ming is without morality. He was a member of the Kuomingtang party; therefore independent action was akin to a lack of filial piety. Doctor Sun may be impracticable, but he has served the country well, and Wu Pei-fu, to gain public acknowledgment of his leadership, has been forced to adopt Sun's program. Chen Cheung-ming, therefore, should not have driven Sun out of Canton. When asked for an alternative method of Chen's joining Peking, no plan was suggested.

2. In Shanghai Wu Pei-fu is not popular, largely because of the operations of his ministers of finance and communications. They have dismissed hundreds of men who have no means of support other than Government service. Some of the men have held minor posts in the ministry of communication for 30 years and are removed only because they are Cantonese. The Chinese claim that the methods of Tung and Gow are like the American spoils system. They are making a show of the numbers they have dismissed, but they say nothing of the numbers they have engaged. Efficient Cantonese and Shanghai are being replaced by stupid Shantung men. Shanghai is seriously affected by so large a number of middle-class people being thrown out of work. Many of them have obligations which they can not meet and which is resulting in the further embarrassment of the Shanghai money market.

3. The dissatisfaction with Tung Kang and Gow will undoubtedly make more difficult the work of Wu Pei-fu. Neither is experienced and both are regarded as executioners of the old Chiaotung clique, and nothing more. In Chekiang and Kiangsu provinces Wu's popularity with the masses is slowly disappearing.

4. In this connection it might be well to point out that a movement is already starting in Kiangsu in imitation of Chekiang to abolish the Tuchunate. The movement is directed against the Tuchun Chi Shih-yuan. His friends say that if the movement becomes sufficiently serious to affect his position, he will become Minister of War.

5. Admiral Tu Shi-kwei, formerly garrison commissioner in Hankow, is on his way to Shanghai with 6,000 marines, according to a report received yesterday by the Chinese General Chamber of Commerce. The chamber has telegraphed to Peking to the effect that the merchants of Shanghai object to any additional troops in this city, and that should Tu come, there would be trouble. They have asked the government whether the reports are true. The purpose of Tu's coming to Shanghai with so many marines is to replace Ho Feng-ling as defense commissioner and to create a bulwark against Lu Yung-hsiang, thus reuniting Shanghai to Nanking. It is even said that the marines are in reality Chi's troops with new uniforms.

FRENCH DISCUSS WASHINGTON TREATIES.

12 July, 1922.

After paying the usual tributes to the United States on Independence Day, orators and editorial writers have found occasion to touch upon two points of vital interest between the United States and France, namely: War debts due by France to the United States, and the Washington treaties.

Discussing particularly the latter, this editorial continues:

The Washington treaties have been submitted to the Chamber for notification, with the hope that favorable action be expedited lest the United States feel delay to be due to unwillingness on our part to ratify.

It is to be noted that the very people who are urging early action by our Chamber are the same who gave praise to the United States Senate for not ratifying the treaty of Versailles.

There can be no doubt that the United States desires early ratification of the Washington treaties by us; but there can be no doubt either that we should examine the matter closely before proceeding to a decision. The treaties have been before the Chamber but eight days.

As to these same treaties, even the United States Senate has spent considerable time on them, and has seen fit to embody in their resolutions of ratification certain reservations. Thus the more reason for our close examination of them.

We have made previous reference to cables exchanged between Mr. Hughes and Mr. Briand, wherein our status as a naval power was regulated without regard to the fact that we are a country of one hundred million people, including the colonies.

Had the proposition been made that the whole world suppress battleships and submarines, we would have ratified without hesitation. But such was not proposed, so we are obliged to examine the details of the agreement, comparisons of forces, the length of time of the duration of the agreement, etc.

We are no more imperialistic on the sea than on the land. But we find that, as regards the reparation question and the armament question, others are inclined to dispose of our rights without showing us consideration. There is no other country that has reduced military and naval expenditures as much as has France in the last three years. This alone should entitle us to examine without hostility and without servility the agreements submitted for our ratification.

The Brandegee reservations voted by the United States Senate make the matter even more difficult for us, and Mr. Frank H. Simonds is authority for the statement that those reservations deprive the treaties of value.

Our problem thus complicated is: In ratifying the treaty without reservation does France bind herself, in the matter of the Pacific, any more than does the United States?

The proposition is made that we vote for the reservations, but this we can not do, because the French Chamber, which alone has the right to reject a treaty, has not the right to make amendments.

The right course to pursue would be for the French Government to incorporate the Brandegee reservations into the project before submitting it to the chamber. But this they have not done. In order that it be done, the chamber may return it to the Government, or it may retire it from the calendar until such action is taken. In view of the approaching vacation, it is needless to remark that this will involve much time. (Adjournment has been taken without ratification.)

The French press, giving expression to unreliable statements and anxious to retain America's friendship, urge precipitate haste upon the chamber.

All the Washington treaties will be discussed in the chamber in a spirit most cordial to the United States, but always with the same freedom as was observed in the United States Senate when that body was considering the treaty of Versailles.

NOTE.—The writer of this editorial, Monsieur Andre Tardieu, is a member of the Chamber of Deputies, and may be expected to discuss the Washington treaties at length when they are taken up by that chamber.

He is an ardent defender of the treaty of Versailles and of Clemenceau.

Opposed to Briand's methods, he now raises his voice in daily protest against Poincare's government. He is credited with seeking the limelight by way of furthering his chances for becoming premier.

His attitude in the chamber next fall may well provoke further delays in action on the Washington treaties.

WORLD'S LARGEST AERODROME.

10 July, 1922.

France is shortly to have the largest aerodrome in the world. It is being constructed at Orly, 10 kilometers south of Paris. It will have an area of 1,000 meters by 1,200 meters, and is situated 89 meters above sea level.

Workshops for the construction of machines, offices for customs and the meteorological services, and school of aeronautics will form part of the scheme, which was begun in 1920 under the direction of the Department of Aerial Navigation and the Undersecretary for Aeronautics.

Two colossal hangars are being constructed to give shelter to dirigibles up to 120,000 cubic meters. The Orly aerodrome will form a supplement to the present aerial station at Le Bourget, and the little village of Orly, in the rural district of Seine-et-Oise, is destined to become the center of modern locomotion and a great industrial city. The new aerodrome will be connected with Paris by tramway. The date of the opening of the aerodrome depends upon the money available for its construction.

FRENCH ARMY AVIATION.

18 July, 1922.

The following information may be considered as reliable.

The number of planes in service is a close approximate, as it was susceptible of checking. The number of planes in reserve (3,000 to 4,000) should be accepted as a rough estimate. The number of personnel (officers and men) is believed to be fairly accurate.

TYPES OF FRENCH AIRPLANES.

I. LIST OF PLANES IN SERVICE.

Pursuit:

1°/Biplane: H. D. 3.
Breguet 17.C2.
S. E. A.

Pursuit—Continued.

2°/—Monoplane: Spad 13.
Nieuport 29.
Spad Herbemont.
Gourdou.

Observation:

Breguet 14 A.2 (Renault).
Breguet 14 A.2 (Liberty).
Salmson A.2.
Spad 16 (probably is Spad cannon).
Farman A.2.

Bombing:

1°/ (day).
Breguet 14 B2 (Renault).
Breguet 14 B2 (Liberty).
Caudron R.°11.

2°/ (night)—
Breguet 16 Bn².
Voisin 10.
F. 50.

Various planes (training, schools, etc.):
Caudron G 3.
Farman 40.
Sopwith.
Spad 7.
Nieuport 27.

Total number of machines in service, 1,300.

Total number of machines in reserve, 3,000 to 4,000.

French military aviation: Total number of officers, 1,300; total number of men, 15,000.

Aviation.

2. Battle order.

Air regiments are numbered:

Pursuit, from 1 to 10.
Bombing (day), from 11 to 20.
Bombing (night), from 21 to 30.
Observation, 31 and upward.

Combat aviation (pursuit and bombing) comprises:

First air division Metz:

Pursuit brigade—
1° Pursuit regiment_____Thionville.
2° Pursuit regiment_____Strasbourg.

Bombing brigade—
11° Bombing regiment_____Metz.
12° Bombing regiment_____Neustadt.

Night bombing brigade:
21° Bombing regiment_____Malzeville.
22° Bombing regiment_____Luxeuil.
3° Pursuit regiment_____Chateauroux.

Observation aviation comprises:

Five (5) home regiments:
31° Observation regiment_____Tours.
32° Observation regiment_____Dijon.
33° Observation regiment_____Army of the Rhine.
34° Observation regiment_____Bourget.
35° Observation regiment_____Lyon.
Two (2) North African regiments:
36° Observation regiment_____Huseein-Dey.
37° Observation regiment_____Rabat.
One group constituting a unit in Tunisia.
The Army of the Levant has an aeronautic force comprising four groups and 2 squadrons.
In the Colonies:
1 squadron at_____Dakar.
1 squadron at_____Saigon.
1 squadron at_____Hanoi.

AEROSTATION.

It comprises two regiments:
First regiment at Versailles:
1 battalion_____Epinal.
2 battalions_____Compiegne.
3 battalions_____St. Cyr.
4 battalions_____Angers.
Second regiment at Toulouse:
1 battalion_____Nevers.
2 battalions_____Toulouse.
3. battalions_____Privas.
NOTE.—The term "regiment" here means air regiment and is analogous, though not quite the same as wing.

GERMANS BUILD AIRPLANES IN ITALY.

15 July, 1922.

The German Aircraft Co. known as the Aero-Union has taken over the Gallinari establishment at Leghorn, Italy, and has already begun the construction of eight all-metal seaplanes at that place. The Aero-Union is controlled by the Allegemene Elektricitas Geshellschaft (General Electric Co.) of Germany, the Hamburg-American shipping interests, and the Zepelin Aircraft Co. Two German engineers and other German specialists have recently arrived at the factory. They are paid every two weeks by funds sent from Friedrichshafen through the Banca-Commerciale.

The Gallinari Co. was a shipbuilding concern and constructed seaplanes during the war and for some time after the armistice. Six of the seaplanes under construction are the all-metal Durnier G. S. type with 260 horsepower Mayback engines placed in tandem. The other two planes are of the Delfin type with one motor. The six G. S. type have already been purchased by Spain.

It is reliably reported that this company is establishing two aircraft companies in Russia and making determined efforts to secure

the control of aerial traffic on the Mediterranean. For this latter purpose it has attempted to establish seaplane factories at Barcelona, Spain, Marseille and Naples in addition to the one at Leghorn. The Italian Government has so far prevented the establishment of a factory at Naples.

French authorities state that a protest will probably be made by France against the establishment of an aircraft factory in the territory of one of the allies, while the latter are retaining a control commission in Germany to supervise their aerial activities. On the other hand the Italian air service authorities informed this office that permission was given this company to establish a factory at Leghorn as its operations could be entirely controlled by Italy, and that France had done everything possible to have this company establish one or more factories in France, in preference to Italy or Spain.

ITALIAN SEAPLANES FOR ECUADOR.

12 July, 1922.

In a few days an Italian aeronautical mission consisting of an officer and several Italian pilots will leave for Ecuador to establish a school which is to be equipped with Italian aviation material. A second shipment of material is now ready for shipment and will be conveyed by another officer. This training material consists of Gabardini monoplanes and biplanes, totaling at least 16.

The Gabardini type is a very successful training machine and has given excellent results in Italy. The longerons, spars and undercarriage are constructed of steel. The monoplane is an excellent machine for preliminary training and the greater part of the shipment consists of this type. It is equipped with a Le Rhone 85-horsepower engine. There are also being sent a couple of Gabardini monoplanes equipped with 35-horsepower Anzani engines. This machine is used for instructing the students in taxying and taking-off and landing in a straight line. The Gabardini biplanes are equipped with the 85-horsepower Le Rhone engine and are used for instructional purposes after qualifying on the monoplane.

The characteristics of the Gabardini training biplane are as follows:

Engine, Le Rhone	horsepower	85
Total carrying surface	square meters	14.82
Span	meters	7.20
Length	do	5.10
Height	do	2.20
Weight empty	kilograms	370
Useful load	do	150
Total weight	do	520
Coefficient of safety in breaking test		12.35

LOSS OF ITALIAN DIRIGIBLE.

15 July, 1922.

On July 1 a 5.000 cubic meter dirigible belonging to the Italian Navy, type PV, was lost in a severe storm near the naval base of Taranto. From information obtained officially and from other sources the dirigible was lost under the following circumstances:

On the morning of the 1st of July the dirigible left the station Grottaglio, between Taranto and Brindisi, for the port of Cotrone, carrying on board Vice Admiral Salazar, commander of the South Tyrrhenean Naval Force, on an inspection trip. The dirigible was moored in the Harbor of Controne practically the entire day, with conical anchors. At 5 p. m. the dirigible started for Taranto, encountering a violent wind storm of over 90 kilometers per hour. The dirigible returned to Cotrone and attempted a second landing in the harbor. It seems that the dirigible was successfully moored again but was lowered close to the water to permit Admiral Salazar to take a boat. During the operation the boat suspended from the dirigible was swamped by the waves and was completely torn from the envelope. The envelope was carried away by the wind and fell at some kilometers distance. The crew and passengers were saved without injuries, except Admiral Salazar, who suffered slightly.

JAPAN AND PROPAGANDA.

June 5, 1922.

By Lieut. Col. B. Roustam Bek. Written for the Peking Daily News.

[Bek is a Bolshevik, pure and simple. Some of his articles, however, are well worth reading and portray the Far Eastern situation from a very original viewpoint. Bek claims to be very pro-American, and it is known that he is doing his utmost to back up the claims of the Sinclair Oil Co. in North Sakhalin Island.]

As far back as 1920 I had already recommended in the American press that Japan had to be watched and watched closely.

"Watch Japan!" echoed Lord Northcliffe in his frank and outspoken article in the Daily Mail of April 18, 1922.

It is well known that Lord Northcliffe can in no sense be considered as a friend of Soviet Russia, but in his reference to the militaristic Japan and its policy in the Far East, he is not only a friend to the Soviets but is even their ally; because he realizes perfectly well that without Soviet Russia's assistance to Great Britain and America, Japan would be able to successfully carry out its aggressive plan towards China, Australia, India, and the Philippines. Therefore there can not be any doubt that this severe critic of the Soviet régime in Russia would, when the critical moment arrives, exert all his efforts to turn British public opinion in favor of the Russians, no

matter what their political opinions may be, as was already the case in 1914.

With extraordinary precision Lord Northcliffe analyzed the morale of Japanese diplomacy, which is the blind weapon of Japan's military party. He says: "Japan is as indifferent in its policy to the keeping of treaties as many a private Japanese trader is in regard to the infringement of other people's patents and trade-marks." In regard to this, I have at my disposal abundant material referring to the period when I was prisoner of war in Japan in 1905. I remember that once the Russian officers of the concentration camp in Matsuyama protested against the Japanese authorities reproaching them for violating international law. "By our own Japanese international law it is rightly done," was the Japanese answer to the Russian protest. As far as I can remember, a famous case in the Tokyo law court (in 1907–8) was widely discussed by the press of the world: it referred to the imitation by a Japanese firm of the famous "Black and White" whisky.

To the astonishment to all contemporaries, the case was adjudged in favor of the imitators, though they used the trade-mark, etc., of the famous British whisky manufacturers. Thousands and thousands of similar examples can be told as proof of the amazing quality of the morale of the Japanese statesmen and merchants. Lord Northcliffe is paying the greatest attention to Japanese propaganda. It has to be mentioned that the Japanese press, as well as the foreign newspapers which are bribed or subsidized by the military clique of Tokyo, do not miss any opportunity to lament over the existing propaganda in the world that is directed against the innocent and peace-loving Japanese nation. Since the Russian revolution, the Bolsheviki became the aim of such Japanese accusation, but in reality the Russians are forced to defend themselves from a most energetic Japanese campaign in the press, and if the Bolsheviki are stronger in that struggle it only proves that intellectually and scientifically they are much superior to their adversaries.

In regard to the dangers of Japanese propaganda, Lord Northcliffe is drawing the greatest attention from British and American public opinion. "We have always to remember," he says, "that hourly, daily, weekly—morning, noon, and night—Japanese propaganda is at work in the form of bribed newspapers, propaganda news agencies, propaganda play, and propaganda films, and that quite a considerable amount of this propaganda has been widely diffused in Great Britain and the United States."

I entirely agree with Lord Northcliffe in this respect: he is absolutely right in disclosing this truth about militaristic Japan, but I can throw more light on Japanese propaganda. It is well known

to everybody that there can not be a good army without the moral support of the whole population, and an armed force of any country is always like a mirror reflecting the nation itself. No sound policy can be expected from a government which is lacking the moral support of its people; consequently there can not be any sound strategy, and no matter how perfect the fighting force of a country may be from a technical viewpoint, it has to fall sooner or later, in case of a conflict with an army which is backed by a nation, morally, and led by strategy which has to accomplish a sound strategical plan.

The same can absolutely be said with regard to propaganda. In Japan, there can not be successful propaganda because it is based on wrong policies and low moral aspirations of the militaristic part of the Japanese population which represents the minority while the majority does not support it.

Thanks to the lack of sound policy in Japan, the Japanese press finds itself in a state of great confusion and even the newspapers, which are subsidized or bribed by the military clique, very often do immense harm to the latter's cause by trying to support it unwillingly. This is also due to complete ignorance on the part of the editorial staff and the writers themselves in reference to the theories against which they have to fight.

In the summer of 1921, the North China Standard, for instance, published a series of articles devoted to economical questions. It was a most amusing salad where utopian socialism was mixed with Marxism, and anarchical individualism with communism. It was a most characteristic illustration of human ignorance and illiteracy on the part of those writers who were supposed to fight against modern social questions. Some of the articles of this category tried to find an identity between Franco-Massonism and socialism.

The Zadivo Nippi, for instance, attained the very zenith of stupidity in fighting bolshevism and discovered that the principles of American democracy and those of socialism are absolutely the same.

The greater part of the Japanese newspapers which wage the propaganda campaign against the soviets is too far away to understand the existing difference between collectivism and individualism.

Being proud of the Japanese spirit of Nipon damashi (Bushido) which, being based on the principles of collectivism, is naturally hostile to the individualism, these newspapers frighten the Japanese with Bolshevism, which is based on principles of collectivism, and bitterly attack it for its fight against individualism.

In short, I can state that in its struggle against Bolshevism, the Japanese press is absolutely ignorant and has, first of all, to learn the alphabet of sociology in order to be able to call themselves propa-

gandists in the real sense of this word. Now, thanks to the ignorance of their leaders and thanks to their stupid lies, they only help their enemies by disclosing the real facts.

It is a remarkable thing that the press, which is devoting its work to the cause of Japanese imperialism, constantly betrays in its articles the plans of the Japanese militarists. This is due mostly to the method of issuing the most childish lies and insinuations against their enemies. For instance, the Japanese plan to support Chang Tso-lin was thus revealed when the world was absolutely ignorant about the intentions of militaristic Japan in that respect.

The design of the new gigantic line of national defense carefully planned and kept in secrecy by the Japanese general staff became known universally in the same way the real intentions of militaristic Japan in Russian Far East and China were thus revealed, thanks to the illiterate Japanese propagandists, who opposed the truth by means of their only weapon, falsehood.

INSTALLATION OF THE KATO CABINET.

16 June, 1922.

The fall of the Takahashi Cabinet and the installation on June 12, 1922, of Admiral Baron Tomosaburo Kato as Premier, was solely the result of dissension in the Seiyukai party, and foreign affairs had a negligible influence. Nevertheless, it is quite probable that in recommending Admiral Kato for Premier, the Genro took into consideration the influence his appointment would have in foreign capitals.

The press of Japan is almost unanimous in condemnation of the Kato Cabinet, but on the grounds of domestic politics entirely. Kato belongs to no political party, and his cabinet is a nonparty one. This is the feature that meets with the disapproval of the press. The papers freely acknowledge Admiral Kato's high character, independence and honesty, but without waiting for an announcement of his policy, they deplore his appointment as a blow to Japanese constitutional government.

Since his return from the Washington conference, Admiral Kato, while Minister of Marine, has repeatedly announced in public addresses and private conversations that he intended to see the treaties drawn up at Washington carried out by Japan in letter and spirit.

It is beyond question that Admiral Kato came back from Washington much impressed with American ideals and methods, and it is thought that his appointment as Premier will have a favorable influence on American Japanese relations.

Admiral Kato still retains the portfolio of Minister of Marine in addition to the Premiership, but has announced that he will probably retain this additional post only for a short time.

JAPANESE NAVAL-AVIATION NOTES.

21 June, 1922.

"H. I. H. Prince Takeshisa Yamashina piloted a navy airplane one hour on 5 June, 1922. He left the Kokosuka aerodrome at 8 a. m. and during the flight flew over Yokohama and Tokyo. It is reported that this is the first occasion an airplane was ever piloted by a prince of the imperial blood.

Airplane Y 105, manned by two Japanese naval aviators from the Yokosuka Aerodrome, was compelled to land in the Yokohama Harbor on 6 June, 1922, on account of engine trouble. The landing was successful but the plane was unable to resume its flight and was returned to the aerodrome by a launch.

17 May, 1922, a parachute trial was carried out at the Tokorozawa aviation ground in the presence of Prince Yamashina and others by Lieutenant Iijima. Lieutenant Iijima jumped from the balloon when it reached a height of 600 meters and landed successfully.

16 June, 1922, an aviator (civilian) was killed and another seriously injured when the airplane in which they were flying "crashed" near the aerodrome of the Fukunaga Flying School. The Fukunaga Flying School is a private concern.

Two airplane motors manufactured at the military arsenal at Osaka, which were guaranteed to run continuously for 30 hours, have been found incapable of running continuously for 10 hours, according to reports of tests held at the Tokorozawa flying field recently."

JAPANESE AIRSHIP EXPLODES.

12 July, 1922.

It is reported in the local press that a Japanese airship, which had been shipped from England in April, and was presumably one of the Vickers small nonrigid type, exploded on Monday morning and is a complete wreck, the hangar in which it was housed being destroyed. There were no casualties.

JAPAN'S ACTIVITIES IN SIBERIA AND KAMCHATKA.

23 June, 1922.

While the Japanese are evacuating Shantung with many noble gestures, they seem at the same time to be assiduously digging themselves in along and near the coasts of Siberia and Kamchatka, where the light of publicity is not so insistent.

This is apparent principally in three ways—

(1) Continued occupation by the Japanese Army, with its attendant retinue of petty traders and shopkeepers.

(2) The practical seizure of the fisheries.

(3) The staking out of mineral claims.

The stationing of the Japanese Army in Siberia and Kamchatka is not known in detail, but sufficient is known to indicate that one of its chief functions is to secure Japanese in such fishing, mining, and trading as they have been able to secure or seize, and to assist them in further rapid development along these lines. In the region around the narrowest part of the Tartary Straits and along the Amur River, the Japanese Army seems to have particularly entrenched itself. The strategic importance of this region is apparent from but a casual glance at the map. There seems to be Army radio stations at Nikolaiefsk and De Kastri in the above-mentioned area as well as at Petropavlosk and Okhotsk, at least, though it seems the latter is not functioning at present.

The question of fisheries along the Siberian and Kamchatka coasts is very much to the fore now on account of the opening of the season and the high-handed methods of the Japanese Government. The chief fisheries in question are along the coasts, bays, and rivers, in waters where the salmon enter in large quantities in proper season to spawn.

It has been the Russian custom each spring to auction these fishing rights, open alike to Russians and Japanese. If a particular bit was not reauctioned it remained the property of the buyer the year before at the same price.

On 4 April, 1922, the Russian authorities at Vladivostok, after advertisement, held the annual fisheries auction. This was attended by Japanese, but no Japanese entered a bid for any fishing. This was done, it has been repeatedly stated by vernacular papers, by order of the Japanese Government. Subsequent to this the Japanese Government announced that it considered the auction illegal, and all Japanese fishermen or companies fishing last year could hold and fish their same fisheries. As all the fisheries had been resold this year to non-Japanese, this made the situation both complicated and dangerous. The Russians protested, and their Vladivostok Chamber of Commerce sent a committee to Tokyo, but to no purpose. The Japanese Navy has dispatched several small men-of-war to the fishing grounds to protect their fishermen in their rights (?), in which naturally they will be assisted by the Japanese Army on shore.

Fish is such an important item in the food supply of Japan that the authorities look upon these fisheries, with prospective developments, as of great importance. Incidentally, when developed further, these salmon fisheries may come in sharp competition with our own salmon fisheries of the Northwest and Alaska.

In the same general region covered by these fisheries, but more particularly the region around the Sea of Okhotsk, the prospects for valuable mineral deposits are very good. Japanese prospectors are

staking out many claims, although they appear to be actually doing but little work on these claims, even on the placer gold mines.

Recently a party of about 15 American prospectors, mainly old Alaskan miners, passed through Japan en route to the region around the town of Okhotsk, where numerous gold placer deposits are supposed to be located, and about the same number are supposed to be on the American steamer *Mazatlan*, belonging to the Olaf Swenson & Co. of Seattle, en route there. The possibilities of more or less serious clashes between American and Japanese miners in this region is worthy of attention.

Sidenberg & Wittenberg, an American firm, who having trading interests in this region and are probably not operating on a very high business plane, have stated that they were going to try to bring pressure on our Navy Department, through Seattle interests, to have dispatched to the region under discussion one or more gunboats as a counter move to the presence of the Japanese ships.

From the foregoing it will be seen that not only have we a general interest in the Japanese intentions, present and prospective, in Siberia and Kamchatka, but the situation presents possibilities of possible disagreeable clashes of material interest.

GRADUATION AT JAPANESE NAVAL COLLEGE.

2 June, 1922.

The Japanese Press reports that 271 cadets were graduated at the Japanese Naval College at Etajima, Japan, on June 2, 1922.

The graduates of this class will start on a cruise around the world on the training ships, *Iwate*, *Asama*, and *Izumo* the latter part of June from Yokosuka.

The graduation exercises were attended by Prince Asaka, Imperial Proxy; Admiral Kato, Minister of the Navy; Admiral Nawa, War Councillor; Admiral Murakami, Commander in Chief of the Kure Naval Station, and other prominent officers of the Navy.

LAUNCHING OF JAPANESE SUBMARINE.

13 June, 1922.

According to Japanese press, the Japanese submarine No. 51 was launched at the Kure navy yard on 12 June, 1922.

This vessel was laid down on 13 February, 1922, has cruising displacement of 750 tons and submerged displacement of 1,000 tons, according to most reliable information, but according to various press reports she is about 50 per cent larger than above figures.

JAPANESE NAVAL EXPENDITURES.

22 June, 1922.

According to the Japanese press, with the scrapping of 14 capital ships, a number of officers and men of the Japanese Navy will be dropped, resulting in considerable reduction in salaries and maintenance, and, further, by revising and simplifying various regulations, and consequent dismissal of excess men, much economy is expected to be effected. The reduction of the Maizura station and the discontinuance of the Ryojun mino station will also reduce expenditures. In order to overcome the reduction in capital ships, it will be necessary to enlarge the scope of training, and for this the fuel allowance has been increased. Therefore fuel expenditures for the next budget may be somewhat larger than the present. Thus, the ordinary expenditures is expected to amount to about 125,000,000 yen.

With the suspension of construction of capital ships, large sums become available in "construction expenditure" and "expenditures for land and sea equipment." The construction expenditure from fiscal year 1923 to fiscal year 1927 amounts to 667,000,000 yen, and out of this the amount allowed for capital ships, yen 350,000,000, becomes available for other use. The balance, which is for construction of auxiliary ships, amounts to about 310,000,000. However, it is expected that navy department will revise the construction schedule for the year of auxiliary ships. The comparison of the new plan with the old is as follows:

	Existing plan.	New plan.
Cruisers	34	15 or 20
First-class destroyers	42	26
Second-class destroyers	44	28
Submarines	100	66
Special-service sh'ps	28	18 or 20

This reduction will amount to about 25,000 tons.

It is significant, however, that while so reducing the number of ships as mentioned, it is intended to improve the inner details and enlarge the scale of ships. The reason for this is as follows: In time of emergency, small craft can be built in a short time, which is not so with the larger ships. Therefore, it is deemed advisable to build larger vessels in peace time and have a smaller number of large ships than too many small ships. Then, from the viewpoint of tactics, if action in the Pacific is to be considered, it is much more advisable to have larger vessels which will have a larger radius of action.

The Navy Department also contemplates to construct a dock at Kure and also several oil tanks at various naval ports, but a reduction in expenditures has been made by the reduction of the activities of certain factories and the reserve squadrons. Very little, if any, reductions are contemplated in aviation expenditures. The

Japanese Navy Department proposes to expend about 32,396,675 yen for aviation purposes during the present fiscal year. The amount to be divided as follows: 2,180,000 yen for the replenishment of equipment in order to arrange for aircraft aboard new war vessels; 1,002,201 yen for experimental work, ashore and afloat; 26,376,036 yen to replenish the standing corps, training corps, airplane and balloon corps; 2,040,986 yen for war materials and equipment to place airplanes aboard old war vessels; 797,452 yen for engaging British aviation officers for instruction purposes. The total amount for aviation is about 13 per cent of the total amount of extraordinary expenditures, exclusive of ordinary maintenance expenses.

Naval maneuvers will be held next year, and the expenses for this will be in the budget. New expenditures that will be asked for in the next budget, as result of naval limitation, are as follows:

Expenditures for scrapping vessels, etc.
Grant money for officers so dropped.
Allowance for workmen discharged.
Expenditures necessary for reconstruction of the *Amagi* and *Akagi*.

Thus, extraordinary expenditures will amount to about 200,000,000 yen, making the total naval budget for the coming fiscal year about 325,000,000 yen, but since the Minister of Marine has insisted on a further cut of 20,000,000, and various bureau heads are working hard to accomplish this cut, the final total figures will be about 305,000,000 yen.

SEAPLANES PURCHASED BY JAPAN IN ITALY.

11 July, 1922.

The Japanese Navy has recently purchased from the Societa Idro-Volanti Alta Italia (Savoia) at Sesto Calende, Italy, six new seaplanes (flying boat type) of the S 13 bis type. They are to be shipped to Japan within two weeks.

The S 13 bis is a fast two-seated observation plane and is equipped with 300 horsepower Italia engines, Hispano-Suiza 4e, made in Italy. The 13 S bis type is practically the same as the S 13 with the following modifications: The bottom and sides of the boat up to the water line also; the bulheads are made of planking. The tail surface with internal control have been placed higher and with the bottom of the rudder covered with sneet metal to avoid wear while maneuvering. The S 13 bis as used in the Italian Navy is equipped with Isotta-Fraschini V 6 250 horsepower engines and the same engine has been retained in 12 new S 13 bis seaplanes being constructed for Italy.

The characteristics of the S 13 bis, equipped with Isotta-Fraschini V 6 engine are as follows:

Span (upper)	feet	36.3
Length	do	29.3
Height	do	10.3
Wing area	square feet	354
Weight (empty)	pounds	1,925
Useful load	do	881
Total weight	do	2,833
Power (Isotta-Fraschini V 6	horsepower	250
Load (sq. ft.)	pounds	8
Load (H. P.)	do	11.3
Speed at sealevel	M. P. H	122
Climb to 9,840 feet	minutes	13
Service ceiling		20,340
Load factor		8

Planes for Japan to be fitted with dual control.

OPIUM TRAFFIC IN VLADIVOSTOK.

22 June, 1922.

The opium traffic is now carried on openly in Vladivostok and other parts of the Maritime. An opium monopoly has recently been granted by the Government to a Japanese firm, which is stated to have paid 250,000 yen for it. In addition to the legal opium dens thus established which have sign boards over the entrance, there are many more which are allowed to carry on business through bribery of the militia and Government officials. This is another indication of the desperate financial straits to which the present Government is reduced; but it also shows how willing the Japanese are to profit at the expense of the Russian population in their time of distress. There can be no reasonable doubt that the Japanese firm which obtained the opium monopoly was aided and abetted by the Japanese military command. The result of this opium trade is, of course, very disastrous. Not only a large number of Chinese and Koreans, but also many Russians in hard circumstances are visiting opium dens seeking forgetfulness of their misery. The number of victims of opium dens is increasing rapidly according to statements made by the local press.

VLADIVOSTOK GOVERNMENT.

19 June, 1922.

Rumors of an attempted revolution by the communists to overthrow the Merkuloff Government in Vladivostok and of a simultaneous attack on the city by partisan detachments were heard early in March, but the Merkuloffs did not appear to be at all excited over

them and announced that all necessary measures had been taken to liquidate any such measure.

Mr. S. D. Merkuloff, chairman of the Maritime Government, on March 3, turned over his duties temporarily to Mr. J. J. Eremeyev, mayor of the city of Vladivostok, ostensibly on account of illness. When this became known there were many alarming rumors circulated of dissensions within the government and of an impending revolution. A public statement was issued by Mr. Merkuloff declaring that he had not resigned and that Mr. Eremeyev had only relieved him during illness and according to existing regulations. On the same day, Mr. N. D. Merkuloff, a brother of the chairman and himself also a member of the government, delivered a speech before a meeting of the local national democratic bloc in which he stated he was authorized to deny all rumors about the destruction of the local national government. "The present Russian national government will not try to escape," he said. "If the Russian national cause is doomed to ruin, we will die on our duty. I came here to invite you to get together; the situation is serious, but it is not hopeless."

Several changes of cabinet members took place at this time and it was quite evident, despite denials by the Merkuloff brothers, that all was not prose and harmony within the Government ranks. The reverses on the military front about this time were undoubtedly partly responsible for this state of affairs as it was now recognized by everyone that the campaign against the "Reds" was a very unwise and ill-advised move. The Japanese being in a position where they are able to play one government against the other and thus carry out their old policy of keeping things stirred up in the Maritime were accused of exerting their influence but were expected to keep the Merkuloffs in power as it appeared to be to their advantage to do so, particularly in view of the Dairen conference which was in session at this time. The Merkuloff Government, while not a willing tool of the Japanese, was so far dependent on them for funds and supplies that the Japanese could use it as a lever against Chita at Dairen. The Japanese were accused of having encouraged the military campaign against Harbarovsk, and to have promised the "Whites" additional arms and equipment in the event of its capture, which promise they did not carry out.

Throughout March, except for the rumors above noted and the changes in cabinet members, conditions in Vladivostok itself remained quiet. The criminal element were always active and there were robberies, murders, kidnapings, etc., just as there has been for years past. The militia and criminal detective police were kept without pay for months, and it is not surprising that little was accomplished in the way of suppressing crime. The Government was considered to have weakened itself economically and financially as a

result of the extraordinary expenses for military purposes. Government officials had not been paid for months, some for half a year. The Japanese had disarmed the villagers so that they were helpless against the attacks of the hunhutses. Mr. S. D. Merkuloff resumed his duties March 18. Persistent rumors circulated that a change of government in Vladivostok was expected, and would be permitted by the Japanese, this change to consist of the taking over of the Government by the Reds. Considerable numbers of Red partisans drifted into the city. Another indication of an expected change was the fact that the Japanese fishermen failed to appear at the Government auction, which was held on March 29, for disposing of fishing concessions along the Okhotsk and Kamchatka coasts. The Japanese consul requested a delay in holding the auction until April 10. As this auction was expected to yield the Merkuloff Government 1,600,000 gold rubles, the supposition then was that the Japanese Government advised its nationals to boycott it, preferring that the money should not be paid over to a Government so soon to go out of existence. A new Government in Vladivostok, it was believed, depended on the outcome of the Dairen conference, the general opinion being, however, that the Chita Government would not come to terms, preferring to wait on a possible recognition of the Soviet Government by some of the Powers at the Genoa Conference, which act would tremendously strengthen the Chita Government. It was also hard to believe that Japan would consent to the Reds entering Vladivostok before an agreement with Chita was reached.

After the outbreak of hostilities between the Japanese and the Chita forces early in April the rumors of a change in government began to subside and the Merkuloff Government apparently took a new lease on life. Reports of a loan of 3,000,000 yen by a group of Japanese capitalists to the Merkuloff Government began to circulate, the security being certain government goods stored in the customhouse godown. Newspapers printed reports of negotiations between the Government and Japanese capitalists for a long term lease of the Ussuri Railway and the Suchan coal mines. Japanese control of the Ussuri Railway would mean their practical control of the Chinese Eastern Railway, owing to the fact that they would be in control of both outlets to the sea (Dairen and Vladivostok) and could dictate their own conditions. It would also establish them firmly in the Maritime, and enable them to realize their economic aims and purposes in that district.

The failure of the negotiations at Dairen in the middle of April turned all eyes toward Genoa as the place where the fate of the Russian Far East would probably be determined. Conditions in Vladivostok remained as usual. The loan from the Japanese reported above had not materialized and the financial condition of the

Government remained as bad as ever. The fishing auction mentioned above was finally held on April 4 but was boycotted by the Japanese. A number of Japanese fishermen were en route to Vladivostok to participate but were stopped at Tsuruga by order of the Japanese Government as they were about to embark on the steamer. Various reasons were assigned for this action of the Japanese, the most commonly accepted explanation being to the effect that the Japanese will engage in illegal fishing protected by the Japanese Navy. According to some of the papers, the Japanese were represented by Russian bidders at the auction. The Japanese have, for several years, insisted on special privileges in the Russian fishing industry and on the nonpayment of arrears for concessions granted in past years. This question was discussed at the Dairen conference. It is the opinion of the commanding officer, U. S. S. *New Orleans*, that the Japanese attitude regarding the auction was due to their belief that the Merkuloff Government would soon be replaced by the Chita Government and that until a more stable government is established they will be safe in continuing to occupy the various fishing stations without regard to the wishes of the Russians. The Chita Government has warned the Japanese that they would not recognize any concessions granted by the Merkuloff Government. To date, however, the Chita Government has not gotten in power in Vladivostok.

Toward the end of May newspapers in Vladivostok began to publish anti-Japanese articles, principally with regard to the question of fishing concessions which were being seized by the Japanese. The passing of these anti-Japanese articles by the censor, after the closing up of the newspaper Golos Rodini on April 14 for criticizing the Japanese Command, showed that the Maritime Government was taking a firmer stand against the Japanese demands and against the pressure the Japanese were exerting on the Maritime Government to approve of the lease of the Ussuri Railway and the Suchan coal mines to Japanese syndicate. The Japanese were criticized for withholding payment of money due the Government, for placing obstacles in the way of obtaining a loan, and for using every possible effort to browbeat it into agreeing to the Japanese demands.

The newspaper criticism of the Japanese because of the fishery question was started by a series of resolutions passed by the Maritime District Chamber of Commerce on May 15 and published in all the local papers. After having enumerated a number of cases where the Japanese Government and the Japanese fishermen have violated the Russo-Japanese Fishing Convention of 1907, the Chamber of Commerce report proceeds as follows:

> The actions of the Japanese in the Maritime and Kamchatka waters contradict their declarations. Even in a conquered territory, according to international law, private property and rights of private persons remain untouched.

Meanwhile, by granting to their subjects the right of freely catching fish under the protection of naval force, the Japanese Government deprives the Russian leasers of their rights, seeing that every fishing station leased by a Russian might be under the threat of being demanded by a Japanese subject who will maintain his demand by Japanese military-naval force. In such cases friction and collisions are inevitable and as a result the Russian leasers will have to leave their fishing stations after having invested their labor and capital, and lose everything.

Considering the above, the Chamber of Commerce and Industry resolved to:

(1) Categorically protest, in the name of the entire trade industrial class, against the above-mentioned actions of the Japanese Government.

(2) Present this protest to the Priamur provisional government, with the request that decisive measures be taken by it to prevent the seizure of Russian national wealth and to protect the violate rights of Russian subjects.

(3) To authorize the member of the Chamber of Commerce, B. J. Bryner, and the member of the Fishery Association of the Russian Far East, A. G. Dombi, to present this protest to the Japanese Government, as well as to the diplomatic representatives of the Powers in Tokyo, and to personally report to them on this subject.

(4) To bring this protest to the knowledge of the local consulates of the United States, Great Britain, Italy, France, and China, as well as to inform the consular corps as a whole, requesting them to inform their respective governments.

(5) This resolution to be forwarded to the Russian ambassador in Washington, B. A. Bakhmetiev, and the ambassador in Paris, V. A. Maklakov.

(6) This protest to be published in the local and foreign press.

The above protest by the Chamber of Commerce received favorable comment by the leading Russian newspapers in Vladivostok.

Concerning this same discussion, an official under date of May 22 sent the following telegram to the American Embassy, Tokyo:

A protest against the appropriation by the Japanese of the Russian fisheries was declared to me by the President of the provisional government on Friday as forthcoming. In explanation, he made bitter complaint of the withholding by the Japanese of moneys overdue to the Vladivostok Government on account of fisheries, telegraph and railway services.

To protect their fishermen the Japanese dispatched the cruiser *Niitaka* and four destroyers to Kamchatka in May and a cruiser to the Okhotsk Sea.

In connection with the fishery question, the following is taken from Nasha Rech of May 27:

The correspondent of this paper writes from Japan that the question about the "free" fishing which is supposed to be done by the Japanese in Russian waters in the coming season is considered by the Japanese themselves as "unwise." Information has been received in Yokohama to the effect that the present maritime government is going to take strict steps with regard to the so-called Japanese "free fishermen" by sending two coast guard ships—*Tomsk* and *Kishinev*—which are to leave for open sea by the end of May. Simultane-

ously with this there is the possibility of a conflict between the Japanese fishermen and the Americans, who have leased some of the fisheries at the last fishing auction in Vladivostok. Such a conflict may result in international complications. This is why a more wise part of the Japanese citizens who are engaged in fishing industry along the Russian Pacific coast is not much pleased with the coming "unrestricted freedom" of fishing industry in Russian waters promised by the Japanese Government, in spite of a strong defense and protection, which may be rendered them by the Japanese Government. Such a change in the attitude of the Japanese with regard to Russian affairs in the Far East is also explained by the recent resolution passed by the Japanese residents in Vladivostok with regard to the Japanese military intervention in the Russian Far East, which was far from being approved by the residents.

During the week ending May 2 there was a great deal of newspaper comment regarding a possible mobilization of the citizens of the Maritime, presumably for the purpose of defending the Maritime Province from invasion by Chita and Soviet Russia. On April 24 an order was issued forbidding the resignation of officers and soldiers of the army and proclamations were posted in the city inviting the citizens to volunteer for the organization of the frontier defense army. These moves toward further military operations have greatly incensed the people. The cabinet and some members of the Government threatened to resign if mobilization orders were issued and the Kappel troops threatened to mutiny. The whole thing seems to have been started by the Japanese with the idea of keeping the Russians fighting among themselves, for it is certain that Japanese money and influence will be back of any military enterprise undertaken by the Maritime Government. Later it was announced that there would be no mobilization.

Early in May it was apparent that the National Assembly was in opposition to the Government. At the opening of the session of the National Assembly following the Eastern holidays, Mr. S. Merkuloff made a statement about the situation in which he took the assembly to task for spending its time making inquiries about trifling matters and not confining its work to more important subjects. A strict censorship was put on all newspapers and rumors were current that the National Assembly would shortly be dissolved and that the Government had decided to pursue a reactionary policy.

On the occasion of the first anniversary of the establishment of the Merkuloff Government, May 26, a member of the National Assembly, at a meeting of the council of the nonsocialistic assembly and members of the nonsocialistic organizations (members of which council established the Merkuloff Government), severely criticized the policy of the Government, causing the members of the Government present to withdraw and the meeting to adjourn. Speeches at other meetings, however, held throughout the city on this occasion, were favorable to the Government.

The differences between the Government and National Assembly continued to grow until the Government was overthrown early on the morning of the 31st May as the result of an attempt to dismiss the National Assembly. General Dietericks, a former commander in Kolchak's army, was called to head a new Government, but latest dispatches (June 12) state he has declined to accept the chairmanship and has announced his support of Merkuloff.

It is believed that no government could have been established in Vladivostok without Japanese support, and that the Merkuloff Government probably has no more love for the Japanese than has the Chita or any other Russian government. The fact that the Japanese connived at the overthrow of the previous government and the installation of the Merkuloff Government should not necessarily be held against the latter. It is possible that the Merkuloff Government, whether mistakenly or not, has believed itself to be working patriotically for the best interests of the Russian people, considering that for the time being the Japanese menace is a lesser evil than that of Bolshevism.

MILITARY OPERATIONS IN THE MARITIME PROVINCE. (Period from November, 1921, to June, 1922.)

"White" army against the "Reds" and Red army against the Japanese.

1. Toward the end of November, 1921, a "White" army of 1,500 men captured Ussuri Station, 55 miles north on the Harbarovsk line. This started the offensive against the Reds with Blagoveschensk and Nikolaivsk as objectives. On December 4, Iman was captured and about December 30, 1921, after hard fighting for a month, the victorious White army took Harbarovsk. By January 14 they had advanced to Station Inn about 44 miles west of Harbarovsk. The Red (Chita) army having then been reenforced started a counteroffensive movement and recaptured Harbarovsk, driving the Whites back down the Ussuri railway line. This offensive by the Whites was reported to have been instigated and supported by the Japanese as a result of their failure to obtain concessions from the Chita Government at Dairen.

2. At the end of February, after the capture of Harbarovsk by the Reds, the main forces of the "Whites" had completed their concentration in the "Bekin" region and no fighting except minor encounters between reconnoitering parties was taking place between these forces and the Reds in that vicinity. It was estimated there was about 12,000 men on each side of the opposing forces in this region. The Reds were composed principally of units of the Chita (Transbaikal) army and of a small number of troops from

Soviet Russia. They were all well armed and equipped and were receiving reinforcements from the Transbaikal via Blagoveschensk and the Amur Railway. The Whites were not so well armed or equipped and suffered many casualties due to the lack of suitable clothing for protection against the extreme cold weather.

3. At the same time along the Ussuri railway bands of so-called Red partisans, not belonging to any organized military force but in sympathy with the Reds, displayed more than usual activity, attacking and damaging the railway line, bridges, and rolling stock at various points between Nikolsk and Ussuri Station (about 15 miles south of Iman). This region being under the control of the Japanese, there had been several clashes between their forces and the partisans. The partisans were apparently trying to interrupt the line of communications between the White forces and Vladivostok.

4. The first of March saw Vladivostok with many fugitives from Harbarovsk adding to the already large number of unemployed. These fugitives were said to have fled from Harbarovsk on account of the presence of Soviet troops in the Red Army. Soviet troops, according to the newspapers, are noted for their cruel treatment of the civil population, while the soldiers of the Far Eastern Republic who are mobilized from the local population are more humane. However, previous sympathy with the Whites when they captured the place and resulting enmity of the Reds was probably responsible for so many leaving the town.

5. The "Whites" steadily retreated to the southward along the line of the Ussuri railway, before the attacks of the "Reds," having reached by March 7 a position some 20 or 30 miles to the northward of Iman Station. Although greatly outnumbered they fought stubbornly and inflicted heavy losses on the "Reds."

6. The Japanese then reiterated their previous announcements that in case any armed group, either "Reds" or "Whites," entered the territory occupied by the Japanese troops in the Maritime such group would be immediately disarmed by the Japanese, such disarmament being in accordance with the Russo-Japanese agreement, concluded on April 29, 1920. As the Japanese lines extended to within a short distance south of Iman further retreat of the "Whites" was impossible without being disarmed. The Red partisan bands continued to raid the railway line at various points south of Iman, but their depredations did not seriously interfere with traffic.

7. By March 21 Iman had been evacuated by the Whites and their front entirely broken. General Molchanoff, commander of the White forces, with about 300 unarmed troops of his command arrived in Vladivostok. These troops had given up their arms to other White

troops who had retreated outside and to the eastward of the Japanese lines, towards Anuchino, where considerable numbers of Whites collected. About 1,000 Whites were disarmed by the Japanese on March 19, having crossed the line south of Iman along the railroad. So far as the Whites were concerned, this practically ended the military campaign. Their lines were broken and their forces dispersed and broken up into small bands or had crossed into the so-called neutral railway zone and been disarmed by the Japanese. Those at Anuchino were soon outnumbered and driven inside the neutral zone near Nikolsk.

8. Some of their military leaders state that the Whites were forced to retreat while still keeping up their fighting strength, owing to a lack of ammunition and supplies. The commissariat was very badly managed, and at times the very necessities of life were not to be had. The feeling among the peasants is also said to have had much to do with the failure of the campaign. The peasants and the local residents did not give any aid whatever to the Whites, but they were also just as passive in their attitude toward the Reds. This attitude is, of course, easy to understand, as the peasants know that if they favor one side to-day, the other side may punish them for it to-morrow.

9. It was generally supposed that the Red leaders would avoid any conflict with the Japanese and would not pursue the retreating Whites further. But they forthwith entered the neutral zone to the south of Iman in considerable force, and immediately encountered the Japanese. The latter found it prudent to withdraw and to concentrate to the southward along the railway in the vicinity of Spassk, about 75 miles north of Nikolsk. They then repeated their warning that the Red forces would be disarmed, and stated that the Maritime Government need not fear an invasion on the part of the Reds.

10. In connection with these maneuvers on the part of the Reds and the Japanese, the Japanese Publicity Bureau on March 25 published the following text of a protest sent by the Chita Government to the Japanese Government:

> The Government of the Far Eastern Republic hold that they are not bound by the terms of the Russo-Japanese agreement concluded in April, 1920. The Government can not but state the indubitable fact that the Japanese command has not only permitted but even facilitated the free passage of armed groups through the special zone provided for in said agreement, which tends to show that evidently the Japanese military authorities themselves consider the restrictions imposed by the agreement not to be applicable in their full extent * * * (follows the testimony of a war prisoner to the effect that the Japanese Army assisted the Whites in the transport of troops, arms, and ammunition).

The above-verbal evidence making it clear that the Japanese troops, so far from observing a neutral attitude in the southern part of the Maritime, have been actually according various good offices and assistance to a party hostile to Chita, the government of the Far Eastern Republic hereby declare that they on their part do not hold themselves bound by the agreement, and that their army in pursuing the enemy will advance without any regard to the zone stipulated in the agreement. Considering the present incipient growth of friendly relations between Japan and the Far Eastern Republic, the Government expects the good offices of the Japanese command and troops for the free and untrammeled passage, through the so-called "neutral" railway zone as well as other Primorian territory, by the Chita army whose exertions are directed toward the crushing of their enemy—the violator of law and order.

In commenting on this the Japanese Publicity Bureau stated the views of the Japanese command to be as follows:

The agreement concluded in April, 1920, between the Japanese command and the Vladivostok Government remains as heretofore in full force and operation with regard to both the Vladivostok and the Chita Governments. As a matter of fact the latter has silently indorsed it, raising no objections against its continuance or the inconvenience of its terms until now. Its present assertion that the argeement does not affect the Far Eastern Republic, being based purely upon theoretical deductions or facts belonging to the remote past, is unreasonable and selfish and at the same time discloses gross insincerity with regard to Japan. The above leads one to the irresistible inference that it is the Chita Government on whom will fall the whole responsibility for the eventual consequence of the steps they intend taking on the strength of their expressed views.

Everything the Chita protest has to say as to the violation of the agreement by the Whites, the assistance rendered them by the Japanese army or the latter's connivance is the result either of glaring distortion of facts, or else complete misconception of the actual situation; the Japanese army strictly adheres to its former position of neutrality, the allegation as to help rendered to the Whites in the supply of arms and ammunition being a simple misunderstanding and nothing else. The fact is that the Whites obtained their arms and ammunition through various channels, purchasing them from partisans or officers and men of the Red contingents in the first line, while after war-like operations had been started vast amounts of arms fell into the hands of the victorious Whites. Nor must the doubtless fact be ignored that the latter, had every possibility of procuring all necessaries at any given time or place, avoiding the prohibited zone. That no arms for the Whites have been supplied by the Japanese troops at an earlier stage (which was desired so keenly) is fully borne out by the lamentations of the Priamur Government's representative in America as well as by the chagrin openly vented by the citizens of Vladivostok.

In short, all the points raised in the Chita dispatch are wholly inconsistent with the truth and being based on a war prisoner's statement made under duress can claim neither value as proofs nor any credit whatever.

As for the declaration that the troops of the Far Eastern Republic, in pursuing the enemy, will at option invade any part of the Maritime Province, it should be kept in mind that the attitude of the Japanese command remains unaltered, and that, if Chita resorts to actions violating the agreement the Japanese army will take suitable drastic measures, so as to maintain its prestige.

11. According to the Japanese Publicity Bureau at Vladivostok, the Reds arrived to the north of Spassk and came in touch with the Japanese forces between March 26–27. On the 27th, near the village Douchovskaya (8 kilometers north of Sviyagino) a Japanese scouting party was suddenly fired upon by the Reds, and on the 31st some 20 Chita scouts appeared at a point 8 kilometers east of Spassk and opened fire on a Japanese patrol, which was forced to answer and drive off the assailants.

12. The Japanese command then requested Mr. Petrof, Chita delegate at Dairen, for an explanation, and demanded that the troops be immediately withdrawn from the neutral zone and again warned that failure to do so would result in disarmament and placing the blame on Chita. On April 1 the Chita troops moved up an armored train close to Spassk and demanded the Japanese to recognize their rights to maintain armed forces in the villages of Boussevka and Gaivoron, both located near Spassk. After further endeavors to induce the Chita forces to withdraw, the Japanese command decided to disarm them and to use force if necessary. The Japanese Publicity Bureau described the subsequent actions, as follows:

FIGHTING IN THE DISTRICT OF SPASSK.

VLADIVOSTOK, *April 4.*

(1) On April 2, at 3.30 p. m., the Japanese demanded the Chita troops stationed at Boussevka to lay down their arms, taking all along every possible step for a peaceful solution of the matter. However, the Chita troops not only willfully refused to comply, but rendered armed resistance, thus compelling the Japanese to resort to force. After a fight which lasted three hours the enemy retired to the north, leaving behind 80 killed and wounded, without having caused any casualties on the Japanese side. The strength of the adversary amounted to 700–800 men.

(2) On the same day, at about 8 p. m., Chita troops having guns attacked a Japanese company on guard service on a hill northeast of Chvalynka, but after a fight were driven off to the north.

(3) A fight is in progress in the railway zone between the enemy and the Japanese troops holding a hill northwest of Chvalynka.

VLADIVOSTOK, *April 4.*

(1) The Japanese detachment which engaged in fight on the night of April 2 on a hill northwest of Chvalynka attacked and drove off the enemy.

(2) On April 3, in the afternoon, the enemy, some 100 men strong, launched an offensive from Gaivoron, in northwestern direction of Spassk. Meeting stout resistance of a Japanese force, he retreated in disorder northward.

(3) In the afternoon of April 3 four Japanese military airplanes carried out a bold fight, bombing the environs of the stations Anenskaya, Sviyagino, and Drozdovo. This aerial raid had a discouraging effect on the enemy.

13. The Chita troops in the Spasskoya region on April 5 were estimated at about 4,000. The Russian papers in Vladivostok upheld the action of the Japanese and placed the blame for the death of more

Russian citizens with the Chita military authorities, who, having entered the neutral zone, refused to disarm themselves or to leave.

14. After the fight of April 2, the Chita troops retreated to the north along the line of the Ussuri railway and were pursued by the Japanese. They destroyed railway bridges and telegraph lines as they retreated. The Japanese used aeroplanes for reconnoitering purposes and also dropped bombs on the enemy positions. On April 5, according to the Japanese Publicity Bureau, the Japanese forces, in two columns, had reached the line Sviyagino-Zinkovka about 20 miles north of Spassk. Describing the advance up to this point the Japanese account reads as follows:

> It seems to be certain that the Reds have suffered heavy losses. One of our shells hitting a Red armored train greatly accelerated the enemy's retreat. The casualties on the Japanese side, were one medical officer, seven soldiers and five horses only.
>
> The whole Red strength is established at some 3,000 men, of whom 500 were arrayed against the Japanese troops in the region Vassiliefka, while their force in the Sviyagino district consisted of some 1,300 men, 7 guns and 2 armored trains.
>
> The bulk of the above forces have retreated far north, leaving partly in trains and partly on foot.

15. By April 11 the Japanese were well to the north of Sviyagino. Minor encounters took place almost every day. No information was given out as to the number of Japanese engaged in these operations, but reinforcements amounting to more than 4,000 men were sent from Vladivostok and Nikolski. Russian papers stated that the number of Japanese troops engaged was about 5,000 but this estimate is believed low. The Russian papers also stated that the Japanese suffered heavy losses and information from several different sources indicated that the Japanese did not report all their casualties.

16. By May 2 the Japanese had temporarily abandoned their offensive against the Chita forces, having again occupied approximately the same positions they did before the invasion of the neutral zone. Their main body had fallen back to the vicinity of Evghenyevka, but their outpost detachments extended as far north as Ussuri Station. The main body of Chita troops withdrew to the north of Iman.

17. It is not easy to understand the actions of the Chita military authorities in bringing on the above hostilities, as they undoubtedly played directly into the hands of the Japanese military party. The situation was used to arouse public sentiment in Japan in favor of delaying the evacuation. It was also pointed out that the Japanese command did its best to avoid bloodshed. Quite a few of the Russians in Vladivostok believe that the Japanese military

party deliberately planned the situation for purposes of their own, but all the evidence seems to show that the Chita troops were the aggressors and were responsible for provoking hostilities. This for the reason that they were repeatedly warned, long in advance, that the Japanese would disarm any troops, either White or Red, which entered the neutral zone. At the same time it is very probable that the Japanese military party is secretly delighted with the course of events.

18. The commander in chief of the Chita military forces, General Blucher, stated in Habarovsk that the Chita Government considers itself in a state of war with Japan, and until the Chita army could receive reinforcements and supplies, they would carry on guerilla warfare. On April 22 the regular mail and passenger train en route from Harbin to Vladivostok was held up by a party of from 80 to 100 Red partisans, several Japanese soldiers who were in the train being killed. On April 24 four cars of a Japanese military train en route from Spassk to Nikolsk were blown up.

19. The affair now developed into guerilla warfare between the Japanese and Red partisan bands. The Red partisans were active in practically all parts of the territory occupied by the Japanese, but their principal operations were along the line of the Ussuri Railway, where they attacked the Japanese garrisons, damaged the railway and telegraph lines, and blew up bridges. During the first week in May a small band of Red partisan cavalry appeared at Sedanka Station, near Vladivostok, and attacked the Japanese patrol, wounding several of the latter, and then disappearing. Strong guards were established by the Japanese at every station between Nikolsk and Pogranichnaya, and a special guard in an armored car now goes with every mail train between these two stations. On the line running north from Nikolsk to Ussuri Station the Japanese are, of course, in greatest force, as their main force is concentrated in this territory somewhere near Evghenyevka. The Japanese also occupy the branch line to Suchan, and in all the territory occupied by them they are operating continuously in an endeavor to wipe out the partisans. By the middle of May the Japanese had made headway against these bands, as the latter appeared not so aggressive. Having been driven away from the railway line north of Nikolsk, the partisans concentrated along the Suchan Railway, and in the Suchan, Anuchino, and Olga Bay regions, planning to capture the Suchan coal mines. On May 19 the Red partisans blew up four railway bridges along the Suchan railway. A report of May 30, however, states that the Japanese have the situation well in hand. The main body of Chita troops remains north of Inman.

NAVIGATION ON FLIGHT FROM LISBON TO RIO DE JANEIRO.

26 June, 1922.

The recent flight from Lisbon was made with a different purpose from any long distance flight heretofore attempted. It was not in any sense a "stunt," but was undertaken to prove the reliability and value of the methods of navigation and instruments which had been adopted by Admiral Gago Coutinho.

The flight has vindicated his ideas absolutely. On the leg from Cape Verdes to the St. Paul rocks, a flight of 11½ hours over the open Atlantic Ocean, he took 40 observations, and as a result was able to lay the course so well that half an hour before sunset they sighted the rocks dead ahead. When it is remembered that these rocks are only a few hundred feet in extent, are for the greater part only 20 feet above water, and the highest point 60 feet high, it is realized that this is no mean accomplishment.

On this flight Admiral Gago Coutinho used the sea horizon exclusively. His previous experiences, as well as those on this trip, show that he can trust observations taken in a flying machine with the sea horizon, to within one minute of arc, or, as he expresses it, they are reliable in exactly the same degree as observations made on board a surface ship.

He used a specially constructed sextant made entirely of aluminum, to save weight. The arc has a radius of seven inches. The idea of using aluminum is to make the sextant as light in the hand as possible.

To take an observation, the Admiral simply leaned over the side of the flying machine. He did not use any special wind shield, but said that the machine itself created an eddy abreast the location of his seat, so that he was not annoyed by the wind. The vibration of the hydroplane did not annoy him in the least. He carried one ship's chronometer and one chronometer watch. The rate of the chronometer was not increased by being carried in the plane.

To take an observation, the machine was brought down to an altitude of 200 feet above the water. The Admiral says that when the air is quite clear it is quite feasible to take observations with the sea horizon from an altitude of 1,000 feet, but at this altitude the sea horizon is not sharp and does not give such reliable results as at an altitude of 200 feet.

The method used to obtain the altitude of the hydroplane, so as to get the dip was to measure by means of a graduated arc on the hydroplane the dip of the shadow of the hydroplane on the water below the floor of the hydroplane. This was easily read to one-half of a degree; which is sufficiently accurate. Knowing the alti-

tude of the sun and measuring the dip of the shadow of the plane below the deck of the plane, the heighth of the plane above water is instantly obtained.

For this, as well as for many other observations, Admiral Coutinho says the secret consists in having your data all worked up ahead of time.

After taking the altitude of the sun, the Admiral worked out his sight by means of the usual Marc St. Hilaire method, using the same formulae that he has used for thirty years. He had, prior to the flight, worked out as far as possible, all the calculations for observations taken on exact degrees of latitude, so that by taking an observation when his dead reckoning showed him to be close to an exact degree of latitude, he soon obtained his intercept. He had previously laid down on the chart his course and had marked in advance the positions at exact degrees of latitude, simply using the notation "A," "B," "C," etc., instead of using the numerical degrees, as he has found this system somewhat simpler in practice.

He stated that five minutes was all that he ever required to obtain the result and that when near the Equator, where conditions are simpler, he obtained his results in three minutes.

The chart used for plotting and navigating was a conic projection chart, the same projection as is used by international agreement for the 1:1,000,000 scale map of the world, which is being made by all nations who are parties to the convention. This projection has the advantage that the scale is equal in all parts of it. The charts used on the flight were on scale 30 m. m. equals 1 degree.

The course was set by means of a small liquid compass on which azimuths were taken in the usual manner. Magnetic compasses, however, are not very reliable. Upon leaving Cape Verde Islands the compass started spinning round and round and kept this up for over an hour. Investigation convinced the admiral that the constant turning was caused by synchronization of the period of the compass with its vibration in its support. He therefore added a slight weight to the compass support, changing its period, and the compass gradually came to rest.

As they could not afford to lose any time on this flight, when they found the compass behaving badly, the admiral took azimuths so as to set the plane on her proper course, and thereafter Captain Cabral steered entirely by the bearing of the shadow of the plane on the water. Admiral Coutinho stated that this is a very reliable and convenient method of steering and that they often used it. To get the drift of the plane they dropped small smoke bombs at intervals and this method gave excellent results.

All told, in the flight from Lisbon to Rio de Janeiro, the navigator took over 100 astronomical observations for position, all with excellent results.

The admiral stated that night navigation in flying would be perfectly feasible. For such work he uses his sextant with its artificial horizon for taking observations of the stars. The sextant has an illuminating device by which the bubble is dimly lighted. He has found by experience that he can trust an average of five sights to be not over five minutes of arc in error.

The admiral stated that, provided at the destination of the flight there were a searchlight capable of being seen 25 miles, he would have absolutely no hesitancy in flying at night, as his errors of observation would be well within this figure. On the flight made the Portuguese cruiser *Republica* preceded the plane to St. Paul rocks, and was to turn on her searchlights at sunset if they had not arrived. Although these searchlights are small and old, previous experiments had shown that they could see the beam at a distance of 25 miles.

Admiral Coutinho was extremely enthusiastic over the Rolls-Royce motors which were mounted in their planes.

The first plane they had was new. It was lost by reason of the fact that they were compelled to alight at the St. Paul rocks for gasoline. Although their plane had a capacity for carrying gasoline for an 18-hour flight, they could not take off the water at Cape Verdes with that amount. The harbor at Cape Verdes is not well protected and is very small, so they had to reduce their gasoline supply to a little over 12 hours' consumption. Even at that the Admiral said that they taxied to the entrance of the harbor, then turned toward the head of harbor, and started their take-off. The water was quite rough and they only took off when close to the head of the harbor, where there was high land and trees, so that immediately after leaving the water they had to make a 90-degree turn to prevent being smashed.

As stated above, this restriction on gasoline carried necessitated their landing at St. Paul Rocks. Here there is no shelter whatever and the sea is always rough, so soon after alighting the pontoons were badly wrenched and filled. The entire plane was lost.

The second and third planes were not new, and the third plane had a Rolls-Royce motor which had already run 8,000 miles, yet the Admiral said they considered it the best of the three engines they had on the flight, and that it is still good for many more flights.

The trouble with the second plane was that something lodged in the gasoline feed pipe from the tank and choked off the gasoline

supply, forcing them to alight on a heavy sea which, as before, opened up the pontoons so that the plane sank. The steamer *City of Paris* arrived in time not only to rescue the aviators but to salvage the engine. The obstruction in the pipe was probably solder from a joint.

The Admiral concluded by stating that he had proved by this flight his theory that flying machines can be as easily and as accurately navigated as surface ships, and that he is now content to retire from flying and, as he expressed it, "Let the boys do it now."

SPANISH AIRCRAFT CARRIER DÉDALO.

23 June, 1922.

The aircraft carrier *Dédalo*, recently commissioned in the Spanish Navy, is a vessel of the following characteristics:

Acquired from Germany in		1918.
Launched		1901.
Material of hull		Steel.
Length, over all	meters	127.40
Beam	do	16.75
Displacement	tons	12,400
Engine (indicated horsepower)		2.250
Number of screws		1
Fuel capacity	tons	940
Armor		None.
Armament		None.
Crew	men	398

The following description of the *Dédalo* was published in the Revista General de Marina for May, 1922:

In the early part of the present month the steamer *Dédalo* made her preliminary trials.

This vessel is one of the German steamers confiscated by the Government, and has been performing service for the Department of Public Works under the name *España No. 6*, and under the direction of the Board of Control for Vessels confiscated by the Government.

It was vitally necessary that the Ministry of Marine secure a floating naval aviation station for its services in order to provide for the supply, repair and upkeep of aviation material that may be concentrated to operate on a given section of the coast distant from any naval aviation station. This was especially necessary in view of the fact that the Ministry of Marine has no aviation stations.

This need was supplied by the transfer from the Public Works Department to the Navy Department of the *España No. 6*, which has been known by the name *Dédalo* since that time.

The delivery of the vessel took place in November, at the Naval Aeronautical School at Barcelona, and the work of alteration began about the middle of December.

The study, plans, tedious details and the work up to its completion and the preliminary trials on May 1, have required, then, a period of five months.

All this has been brought to completion by the initiative and direction of Colonel of Naval Engineers Don Jacinto Vez and Lieut. Commander Don Pedro María Cardona.

The *Dédalo*, not strictly an aircraft carrier in respect to the signification of this term as a unit of the fleet, since she lacks speed and other characteristics indispensable for such vessels, is, as we have already said, a movable naval aeronautic station.

That part abaft the smokestack is used for airplanes and hydroplanes; that forward for dirigible balloons. In the former part there is a high deck of about 60 meters which serves for adjusting the machines and which is prolonged and connected with an elevator, provided for lowering below decks some special aeroplanes like the *Parnall-Panther* and perhaps the *Martinsyde*, chase and rapid scouting types. Forward of this deck is installed a derrick capable of handling the heavist hydroplanes, like the flying boat *F–3*. On the lower decks are the repair shops and storage spaces for hulls, wings, etc. There is a total capacity for carrying from 20 to 25 hydroplanes of the types up to the present adopted by our air service, viz: Flying boat *F–3*, *Savoya 16*, and *Macchi 18*.

The large elevator permits the lifting of these apparatus to the equipment deck for preparation before launching to the water.

The safe storage and carrying of gasoline is duly provided for.

Also in the after part of the vessel places are provided for the storage and safeguarding of aviation bombs of various kinds.

In that part of the vessel used for dirigibles there is sufficient space for carrying two dirigibles, type S. C. A. of 1,500 cubic meters, and two captive balloons A. P. of 1,200 cubic meters. As the vessel carries in the bow a mooring post for dirigibles (it is a lookout tower, as is seen in the photograph), it may be possible for her to navigate with one moored to the post and another ready below; but this is a point which only experience will be able to decide. It will also be important to consider the latest theory that the storage of an inflated dirigible in the hold may constitute a serious danger, due to the influence of the ship's and outside radiotelegraphic stations.

A few batteries of bottles of hydrogen gas and a small production plant assure a sufficient supply for the balloons.

The vessel carries a large number of motor boats, indispensable for maneuvers with aerial forces and as a means of rescue.

Finally, the quarters for the crew, and especially for the aviation personnel, have been the object of much care, as is due a personnel which, devoted to such an exhausting and perilous profession, should receive such comforts and considerations as will compensate in a small degree for their fatigues and risks.

NOTE.—The *Dédalo* has no flying deck. She carries only hydroplanes, which are lowered to the water by a large crane.

INTELLIGENCE SUMMARY.

July 29, 1922.

Source: Military Intelligence Division.

It is unlikely that the reparations commission will render any decision on Germany's request for a moratorium on reparations payments until after the expected meeting of the allied council in London early in August. As a result of the acceptance by Germany of the scheme of financial control set forth by the guarantees com-

mittee of the reparations commission, which has just returned from Berlin, France, is now willing to discuss the question of a moratorium, but press sources seem to confirm what was indicated in the last issue of this summary; namely, that her consent to a reduction of German reparations will be further dependent on a cancellation by Great Britain of France's debt to the former country.

It is probable that Great Britain will be forced to accept this solution, disadvantageous to her as it seems. The failure of the Genoa and Hague conferences, the world-wide apprehension at the possibilities involved in the German-Soviet agreement signed at Rapallo, and the apparently complete vindication of the French contentions that no satisfactory agreements with Soviet Russia would be made at present, have given France a dominant position over Great Britain as regards European politics. The latter's precarious internal economic situation demands a restoration of European markets and a stabilization of the financial situation in the countries of central Europe. This point has been brought out repeatedly in this summary and in the press, but it must never be lost sight of in analyzing the European situation.

Sir Arthur Balfour in a speech delivered on March 7 set forth very clearly the relation between the British economic situation and the European political situation, when he stated "The Government has got to deal with this question of unemployment, by using national influence, such as we possess, to promote cooperation between nations upon which the prosperity of every nation in the world leans and of all nations in the world, ourselves in the highest degree; we have got to pay for what we eat by what we make, and we have got to pay for what we eat by exporting what we make, and we have got to get some one to buy what we make."

As a concrete example of how European unrest affects markets for British goods, the situation may be cited in one of the large factory towns or cities in the Manchester district, where normally nearly all the working population is engaged in the spinning of cotton. Before the war 80 per cent of this cotton went to Silesia, and two months ago, due to the long period of unrest in Silesia, 60 per cent of the operatives were out of work and an additional number were working on part time. The general unemployment situation was touched upon in the summary for May 6, when the unemployment figures were given for the end of February as 1,837,000 out of work and 12,000,000 persons receiving assistance of some kind, direct or indirect, from the Government, at a cost to the taxpayers of more than $1,000,000,000 annually. Since that time unemployment has slightly decreased (the figures on June 30 were 1,434,900).

It must not be imagined, however, that Great Britain will agree to the French proposals, as outlined above, without compensations.

The London conference will discuss other questions, including Tangier and the Near East, and an adjustment of the different viewpoints of France and Great Britain on the Turkish-Greek situation may permit a solution of the problem which has been deadlocked now for several months. Politically, Great Britain is immeasurably more interested in the Near East than in western Europe, so that political concessions to France in the latter sphere are not such a bad policy from the British point of view, especially if economic advantages can be gained at home and political advantages in the Near East.

Ireland.

After the fall of the last rebel stronghold in Dublin on July 5, the provisional government issued a call for volunteers, reorganized its forces, and began a general clean-up of south Ireland. On July 12 the barracks in Sligo were captured, followed on July 15 by the capture of the town of Collooney, a few miles farther south. On July 16 two widely separated centers of insurgent activity were captured—Fort Inch, in Donegal County, and Dundalk, on the coast, a short distance north of Dublin.

During the past 10 days most of the fighting has taken place in southwest Ireland and in Mayo County. Limerick and Waterford were captured by the regular forces on July 21, and the line at present leaves the counties of Kerry and Cork and parts of the counties of Limerick and Waterford in the hands of the insurgents. Further north in Mayo County the approximate line is also shown. This does not mean that all the rest of southern Ireland is entirely under the control of the provisional government, but this control is being gradually extended, and the latest information indicates that the insurgents are being pushed back towards the west and southwest. No British troops are engaged in the fighting in southern Ireland.

Germany.

The assassination of Doctor Rathenau being considered an attack on the safety of the Republic, President Ebert issued a special decree which was primarily directed against monarchism and all activities towards the reestablishment of the old order. The Bavarian Government promptly adopted a hostile attitude towards this decree. Count Lerchenfeld, the Bavarian premier, declared that the Bavarian Government could not give its assent. The masses of the German people are on the side of the Republic, as was illustrated recently by remarkable demonstrations, but what prevents the Central Government from taking drastic measures is that the principal military forces of the State, the Reichswehr, is mainly monarchist in character, and the Security-Police is largely untrustworthy, while Munich remains the focus of all the reactionary forces in Germany.

This Munich-Berlin conflict is rapidly reaching a critical and even dangerous point. Bavarian troops have been recalled from maneuvers to the large cities for suppression of any revolutionary movement against the Bavarian Government, which has requested the Federal authorities in Berlin to withdraw their ambassador, Count von Zech, from Munich.

Russia.

Considerable difference of opinion exists in recent information received concerning the value of the Soviet army. The German general, Bauer, acting as German military attaché in Moscow, after a review of the Moscow garrison on 1 May, expressed his admiration of the training methods in vogue in the Soviet army, and stated that individual training was very highly developed, and that the old corps of Grenadier Guards, formerly stationed in Moscow, made no better impression than did the present garrison.

On the other hand, Kamenoff, commander in chief of the Soviet army, presents the situation in a less favorable light. His statements contradict those of Trotsky, who, at the review of May 1, said that the Soviet army was ready for any eventuality. General Kamenoff had the impression at the completion of a tour of inspection that the Communist officers, after undergoing training during the past few months, were totally incapable, had not the remotest idea of their duties, and that the purely political instruction in vogue in the military schools should be done away with.

A recent report indicates that the Bolshevists are redoubling their efforts to get ex-officers of the imperial régime, at present resident abroad, to join the Soviet army. A special recruiting commission has been recently formed and will proceed to the principal capitals of Europe, commencing with Berlin, in search of officer recruits. Admission to the Soviet army, for ex-officers of the Imperial army, will be subject to the following conditions:

(*a*) Amnesty to all officers who fought in the so-called White armies.
(*b*) Appointment in accordance with (1) Services rendered during the war, and (2) Special knowledge.

Only line and staff officers (not administrative officers) will be admitted. Accepted candidates must take an oath of allegiance to the Soviet constitution.

The Near East.

It was stated above that Great Britain will probably be willing to accept the French economic proposals for the settlement of the German reparation question providing she can secure French assistance in the settlement of Near Eastern problems.

Recent developments in this part of the world are such as to undoubtedly cause the British considerable apprehension. While

the Greek-Turkish deadlock continues, Bolshevist influence with the Turkish Nationalist Government, both political and financial, is believed to be growing rapidly. It is reported, although unconfirmed, that the Turkish Nationalists have been forced into signing a new agreement with Soviet Russia protecting future Russian interests in the Near East as well as greatly increasing Bolshevist control over the Nationalist Government.

The first clause of this agreement is reported to stipulate that in the present Turkish-Greek conflict Turkey can not make peace without Soviet consent; in clauses two to five it is laid down that should Turkey conclude peace with her present enemies, she undertakes not to allow the British to use Turkish territory for action against Russia. Should a Balkan or Caucasian country attack Russia, Turkey promises to intervene with all available forces. There are other provisions, including one that the Soviet Government undertakes to supply the Turkish army with all necessary munitions to continue the present war against Greece and to appoint a Soviet military mission which will be attached to Turkish Nationalist headquarters.

In the meantime the Bolshevists are reported to be gradually organizing the towns and villages in the eastern vilayets of Anatolia, with the intention of creating "independent" Soviet states in this region which would be dependent on the Moscow Government just as are the states in the Caucasus at present. Any Russian penetration to the south, towards India or towards Egypt and the Suez Canal, is a direct and vital menace to British interests. Therefore, the reported activities of Enver Pasha against the Bolshevists in Bokhara and Turkestan (the most direct approach to India from the north), and the efforts of Halil Pasha to foment disorder in Persia (where British influence with the present Government is weak) are of especial interest at the present time.

The Far East.

Conditions in China seem to go from bad to worse. The treasury at Peking is empty, a fact that is emphasized by reports from Peking that five of the Powers are bringing pressure to bear for payment of the interest and principal due on loans to China. There are no funds available for payment of the Boxer indemnity, and a number of Chihli divisions are mutinous because of long-deferred payments.

Chang Tso Lin has refused to hand that part of the rolling stock of the Peking-Mukden Railway (estimated at 75 per cent) which was taken northward by his troops in their retreat from before Peking and Tientsin. The revenues of the railway have dropped to a very small figure—a condition which is aggravated by the fact that the earnings of the railways are a guarantee for foreign loans. Chang's

position in the Manchurian Provinces seems to be just as strong as before his recent defeat on the Chihli plains. There is no force in China which can cause him to alter his defiant attitude.

Sun Yat Sen is reported to hold the balance of power in the old republican parliament, which is expected to convene in Peking on the 1st of August. If certain members of the parliament, who are reported loyal to Sun, should withdraw from the coming session, it would reduce the membership below the quorum through which President Li Yuan Hung hopes to bring about the unification of China. Sun remains in his gunboat in Canton Harbor and has failed to reply to President Li's invitation to come to Peking and assist in bringing about a union of the north and south.

The fighting reported in progress at Shiuchow, north of Canton, between the forces of Chen Chiung Ming and troops of Li Lieh-Chun, commander of Sun Yat Sen's futile expedition into Kiangsi, has apparently resulted in a victory for Chen Chiung Ming.

Siberia.

The Japanese Government has been conducting negotiations recently with the Government of the Far Eastern Republic with a view to a resumption of the conference which was broken off at Dairen on the 16th of April. The medium through which negotiations have been conducted is Mr. Antonoff, the representative of the Dalta News Agency (official bureau of the F. E. R.) at Tokyo. Mr. Antonoff has made two trips between Tokyo and Chita in an endeavor to reach a common ground upon which to negotiate at the conference table.

The Japanese have made a public announcement of the date of their withdrawal (October 31, 1922) of the Japanese expeditionary forces from the Maritime Province. In doing so they have voluntarily surrendered a point which was Japan's chief weapon at Dairen. The trade delegation of the Far Eastern Republic in Washington has announced the receipt of official advices from Chita to the effect that Japan desires that the question of indemnity for the so-called Nicolaevsk massacre be inserted in the agenda of the coming conference. During the last conference the Japanese held that this question could be discussed only with Soviet Russia, and in the meantime that occupation of the Sakhalien district would be continued. Press advices from Tokyo state that the Far Eastern Republic has agreed to reopen the conference and that Soviet Russia will be represented. A consideration of all reports leads to the conclusion that Japan would like to come to a settlement of all Siberian questions up to and including the final disposition of the northern half of Sakhalien, providing that satisfactory terms can be arranged with Soviet Russia and the Far Eastern Republic.

An official dispatch from Tokyo quotes Foreign Minister Uchida to the effect that any government which may assume control in Vladivostok, following the evacuation of Japanese troops, would be expected to agree to the protection of Japanese subjects. Japanese citizens desiring to return to Japan, however, would be transported home at the expense of the Japanese Government.

Latin America.

The Tacna-Arica conference was brought to a successful conclusion on July 20, 1922, when the protocol embodying the Hughes formula of procedure, as outlined in the last issue of the summary, was signed by the plenipotentiaries of Chile and Peru. By stipulation ratification of the pact will take place within three months, and the provisions for a speedy and final adjustment cover all contingencies.

The significance of the settlement in disposing of a forty-year-old dispute which has engendered continuous internal and international hostility and disruption can not be overestimated; but far greater importance attaches to the precedent, established by the conference, in the creation of an agency by which the solution of the diplomatic problems peculiar to Latin America may be brought about. The expressed willingness, in this instance, to carry such a significant and involved problem to a complete solution on a broad field of discussion before a foreign court of arbitration marks "the greatest forward step in the interest of peace on this hemisphere which this generation has witnessed," as observed by Secretary Hughes.

The moral and stablizing effect of the above is reflected in the attitude of various countries toward the coming Pan American Conference, to be held in Santiago, Chile, in March, 1923. North and South American diplomats agree that it will be the most important move toward the maintenance of peace and economic well-being in the history of Pan American relations since the signing of the Monroe doctrine. Uruguay has suggested an American "League of Nations"; and has already planned to present a proposal at Santiago that the question of the limitation of armament of all Latin American countries be included in the program.

Many believe that a fixed policy regarding the recognition of de facto governments would greatly lessen the possibility of political revolutions so frequent in Latin America.

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 10—1922.

15 OCTOBER, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 10—1922—15 OCTOBER, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigation Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

The Ship's Intelligence Officer.

The Office of Naval Intelligence relies to a large extent upon the information collected by the ship's intelligence officer.

O. N. I. keeps in close liaison with the Government departments; receives reports from the naval attachés; collects from publications the information therein contained, but unless there be a constant supply of information from cruising ships, the material at hand will be incomplete when it is most needed.

The value of information assimilated by a central office and ready at hand for our commanders in chief in case of war has advanced in direct proportion to the great strides made in science, invention, and in the means of communication making for swiftness in operations.

In military operations of any character, the service of information is an essential element. Peace is the golden time for war preparation, and certainly the obtaining of information is a vital preparation, neither to be neglected nor slighted. If, when war comes, we in the Navy do not know all that it is possible for us to learn during peace about our probable enemies, we shall have no one to blame but ourselves. Our probable enemies are not neglecting their opportunities of this kind.

A navy's chief interest lies in its foreign competitors. We are not a coast guard. The development and employment of our service will never be dependable unless it be adjusted to our national policy; and such an adjustment requires a more intimate knowledge of foreign national affairs than we have ever sought to obtain.

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MILITARY POLICY OF BRAZIL.

25 July, 1922.

[There is quoted below a memorandum concerning the question of the campaign in Brazil for increasing its military forces, as reported in articles of La Prensa of Buenos Aires.]

"Back in 1906 the Brazilian Government passed an act providing for the acquisition of a certain balanced naval force which it was believed would be consonant with Brazil's needs for naval defense and with her position as the largest South American State.

"The European War broke out before this program was completely realized and one dreadnought and some smaller ships of the original authorization were never acquired. Furthermore, the plan to build a military port, including a dockyard for caring for the fleet, was likewise not carried out.

"Up to the present time no other ships have been acquired or ordered. Consequently, Brazil has to-day no up-to-date ships, and several of the existing units are so old as to be of no military value.

"Meanwhile both Argentina and Chile have acquired powerful ships of later design than Brazil's and, by the methods of evaluation used in the Brazilian naval general staff, Brazil is clearly inferior in naval strength to either of the other powers.

"It is the opinion of Brazilian naval officers that the incompleted part of the 1906 program should be carried out, acquiring units which would each be the most efficient of its type in the world, and the confidential report of the naval general staff stated that the Brazilian force should be equal to the combined strength of Argentina and Chile. This they argue is necessary, not only to insure Brazil's safety from aggression under all conceivable political situations, but also due to Brazil's dignity as the largest and potentially most wealthy of the South American States. In view, however, of Brazil's financial condition and of the great cost of dreadnoughts, it is admitted that the added units should be all of types other than capital ships.

"In an acquaintance extending over more than two years, I have never heard a Brazilian—civilian or naval—express or suggest the idea of aggression against Argentina or any other power. Constantly the thought has been to meet foreign (by which is *always* meant Argentine) attack; even in the war plans to meet such attack, all action centers in a protection of the Brazilian coast by the navy and not in an attack on the enemy's coast.

"There is a deep-seated distrust of Argentina and fear of her power in the minds of most naval men whom I have known. I have been solemnly assured by Brazilians who are in responsible places that Brazil has undeniable proof not only that Argentina possesses four new, large German-built submarines, but that they have maneuvered with the fleet, although I have from non-Brazilian and, in my opinion, infallible sources, the knowledge that no such submarines exist.

"In a speech made by President Pessôa to a group of naval and military men at a gathering at which I was present, he stated that his experience at Paris on the Peace Commission had shown him that nations are listened to and exert influence in proportion to their military strength, and expressed his desire that Brazil should have armed forces consonant with her position as a large and great power. The President spoke of the steps already taken to reorganize the army in the light of the experience of the World War and to indoctrinate it correctly, then spoke of his desire to see the navy modernized and strengthened. In this there was no hint of aggression, but rather a suggestion of the well-known maxim to 'Speak softly but carry a big stick.'

"In discussing foreign policies with well-informed Brazilians (mostly in official positions) I have gathered that they watch affairs in Paraguay and Uruguay closely, fearing Argentine influence and aggression, and that Brazil stands ready to aid either of the small countries to combat such actions, but does not directly interfere or attempt to influence the countries concerned.

"Brazilians feel that Argentine's claim to the whole of the River Plate is grossly unjust to Uruguay.

"Brazilians feel that Argentine influence on the Parana River in Brazilian territory, which influence flourishes on account of the remoteness and lack of communications with that region, is a menace to Brazilian territorial integrity. Within the past week President Pessôa has asked the Congress to define specifically the Federal power over all border territory, so as to prevent the States of the Union from alienating to foreigners Brazilian rights in such territory. He cited acts in Amazonas on the border of Guyana as showing the need for this definition, but I am sure he had the Parana River frontier in mind also.

"To sum up (1) Brazil is taking steps to reorganize and modernize her army, also to reorganize and strengthen her navy, and to build a good dockyard and possibly a military port. (2) In my opinion, this action is based slightly on the first of Doctor Zeballos's premises—that Brazil aspires to recognition as the first South American power—but is grounded far more on the third premise—a fear of Argentine aggression."

BRITISH BOMBING TRIALS.

4 August, 1922.

The Admiralty extended invitations to naval attachés, air attachés, and representatives of the leading newspapers, to witness the following "Programme of Dummy Bombing and Machine Gun Trials" off Portsmouth 1 August, 1922:

Run No.	Height.	Attackers.	Type of attack.	Number of bombs.	Target.	Time.
						A. M.
1	8,000	4 D H. 9A	Individual	24 each	Agamemnon	0900–1030
2	Point blank.	4 snipes	do	12 each	do	1030–1130
3	do	6 camels	Machine gun	do	do	1130–1230
						P. M.
4	8,000	4 DH. 9A	Individual	24 each	Agamemnon	1400–1530
5	8,000	2 HP. and 1 1 other	do	32 each	do	1530–1700

These exercises were carried out to the eastward of the Isle of Wight, 15 to 30 miles from the shore station from which the planes proceeded. The weather was particularly favorable—bright sunshine; westerly wind force 4–5; the fast-moving scuds at times made it difficult to keep track of the 4 *DH.9A* planes, operating at an altitude of 8,000 feet.

The old battleship *Agamemnon*, with turrets removed and otherwise stripped, was used as a target. All hands left her just prior to starting the program, and she was operated by radio from a destroyer about a thousand yards astern. Four other destroyers and a tug surrounded the *Agamemnon* at approximately the same distance from her, evidently to plot fall of shots, as well as to keep water traffic well cleared. During all the runs the *Agamemnon* was maneuvered 90° or more. Apparently the *Agamemnon* functioned perfectly during these trials, though I understand that during the recent exercises witnessed by the King, steering control jammed, causing some trouble. During the exercises the *Agamemnon* maintained a speed of from 10 to 15 knots, except during the last run when, in approaching her anchorage, steam was apparently allowed to run down so that she barely maintained steerage way.

The attacking planes approached in groups from the direction of Gosport, and usually passed over the target before attacking. Ten to twenty minutes elapsed from the time they were sighted until the first bombs were dropped. In the case of the two Handley Page machines over half an hour was taken by them to gain the altitude, and after getting into approximate position their movements were very deliberate.

The program was carried out as laid down, excepting that one of the De Haviland planes fell before making the attack in the first run. A destroyer picked up the crew; there were no casualties.

In the last run a Vimy plane accompanied the two Handley Pages, but the Vimy dropped only a single pair of bombs. During this last run a small De Haviland plane maintained a position just above the attacking Handley Pages, evidently to witness the operation of the attacking planes rather than results obtained. This swift-moving small plane in this position was matter of general comment, particularly the facility with which such planes could gain an attacking position with respect to the heavy, slow-moving bombing planes.

The position assigned the *Canterbury*, from which our observations took place, was 3,000 yards abeam of the target ship. Generally the point where the bombs struck was visible, though frequently a destroyer intervened. From our position it appeared that there were few bombs that struck beyond a ship's length from the target; and most of them appeared to strike within 50 yards of the vessel.

Taken by runs, my observations were as follows:

Run No. 1.

The four *DH.9A* approached in formation, took up same course as target, a single bomb being dropped as they passed over the target. Planes then attacked singly, using the same or reverse course of target vessel at first, and then oblique right-angle courses. Two direct hits were made, one on forecastle and one on quarter deck. Many bombs apparently dropped close alongside; very few were wide of target. This run lasted over an hour, in the latter part of which the target changed course about 90°. One of the attacking planes fell and was picked up by a destroyer.

Run No. 2.

The 4 Snipes approached rapidly and began to attack within 10 minutes of being sighted, and completed the attack within 10 minutes more. The Snipes were in close formation and approached at an angle of 45° from vertical in making attacks. Individual attacks were made apparently with a great deal of assurance, approaching the vessel to within 100 yards, and they delivered their successive attacks very rapidly. Generally they took up the course of the target vessel, but often took an oblique course. The bridge and foremast appeared to be the principal objects aimed at, and were frequently struck, as well as other parts of the ship. Only 3 out of the 48 bombs failed to make a direct hit on the target.

Run No. 3.

The Camels approached from ahead, or on the bow, opened fire at approximately a thousand yards, and continued fire until reaching a point where it was necessary to turn. They approached the

target at an angle of about 30° from the horizontal. Canvas screens stretched around the bridge and foremast were evidently the points of aim. The accuracy of fire could not be observed from the *Canterbury* other than a considerable number of shots were seen to strike the water close to the ship's side.

Run No. 4.

During the first part of this run the speed of the target was apparently 15 knots, and her course was changed frequently during the run. The planes commenced the attack about 10 minutes after being sighted. The course of the planes during the attack was generally the same as the target, but some of the planes took oblique or right-angle courses and seemed equally successful in making hits. Six direct hits were made on the target and, with one or two exceptions, the other bombs dropped within a ship's length. The exercise continued for over an hour. Apparently a height of 800 feet was maintained.

Run No. 5.

As previously stated, the Handley Pages were half an hour or more commencing the attack after being first sighted. At first both planes in attacking took up the course of the ship. Later, one of the planes took a course approximately at right angles to the course of the target; this plane made two direct hits on the target, the only hits made during the run. During this run the target slowed to 6 knots and then to steerage way, and finally almost stopped, then started ahead slow again. This change of speed evidently delayed the attacking plane, which failed to drop a bomb on one occasion and on two other occasions the bombs dropped were farther from the target than any others during the day.

The 9-pound smoke bombs used during these trials appeared to be very satisfactory. The bombs, upon striking the ship, produced a great mass of white smoke, and usually in striking the water enough smoke was produced to clearly indicate the point.

As an indication of the importance of the trials, it may be noted that Captain Guest, the secretary of state for air, and Rear Admiral Chatfield, assistant chief of the naval staff, witnessed them from the destroyer *Winchester*, and Air-Commodore Brooke-Popham from a flying boat. From comments made on board the *Canterbury* during the exercises, the naval attachés and air attachés regarded these trials as of considerably more interest and importance than they had anticipated from the program furnished by the Admiralty. They, as well as the representatives of the Admiralty and of the air ministry on board the *Canterbury*, appeared to be particularly well pleased with the results obtained. Evidently those that participated

have been undergoing an extended course of training, including bombing from a high altitude. No one had any illusions about the practice meaning anything other than accuracy of bombing a moving target that varied course and speed. This exercise evidently is one of a series that is being carried out jointly by the air ministry and the Admiralty to provide data to support their respective claims before the committee of imperial defense. These other trials and tests are frequently alluded to in the parliamentary debates, and occasionally in the press, but no information in regard to them has been obtainable by any of the attachés.

COMMENT ON BRITISH BOMBING TESTS.

Source: British press.

4 August, 1922.

The bombing and other practices directed against the old battleship *Agammenon*, off the Isle of Wight, did not throw any light upon the issue between battleships and aircraft, and they were not intended to do so. The air force has undoubtedly made great strides in accuracy of bomb dropping, and improved sights and other arrangements have made it possible to obtain a fair percentage of hits on a slowly moving target from a considerable height—8,000 feet. This is an important point, as the greater the altitude from which hits can be obtained, the less the danger to the aircraft from the antiaircraft guns. It now remains to be ascertained what the navy can achieve in the way of naval aerial target practice. It was also shown that low altitude attacks by fast-moving planes on a surface vessel, possessing relatively small defensive qualities, both passive and active, would interfere most seriously with the operation on which the surface vessel was engaged if it did not put an end to them altogether.

The above, however, are minor points and only form a small part of a very large question. The principal question, of course, is what part is the air likely to play in naval warfare in the future. It is practically certain that it will play a highly important part, and the following points may be taken for granted:

First, that the navy, which is deficient in either its number of aircraft or in aviators skilled in all the phases of naval warfare, would be at a very grave disadvantage;

Second, that during the approach of two fleets to each other, the fleet whose aircraft establishes control of the upper air will have its tactical movements greatly facilitated probably to the extent of being able to obtain and hold a position of great tactical advantage;

Third, that during a fleet action the side whose aircraft are able to drive home their attacks on the enemy, both while he is deploying and subsequently, will be able to establish that superiority of gunfire which, it is contended, is likely to remain the decisive factor for very many years to come.

If the above assumptions are correct, it appears that the lesson is that, in order to achieve what has been outlined, aircraft should be an equal part of the navy, just as are light cruisers, destroyers, and submarines; and it appears, therefore, that the navy should have control of what is logically a part of it. It appears that it is just as absurd to force the Admiralty to rely on another department for its aircraft as it would be to put not only destroyers and submarines, but their crews, in the same category.

The counter argument, as advanced by Admiral Sir C. Lambert, is that an aerial combat is the end for which an aviator must be trained, and that such training is best accomplished by means of a central body, such as the present air force. However, although this may be admitted, it is also contended that, no matter how important aerial combat may be, in regard to naval operations, it is only one of many means to obtain an end—that is, the destruction of the enemy's forces, which necessitates full naval knowledge in all participants. The navy, for instance, does not train officers for fighting only in destroyers and submarines. While it is true that officers specialize in these branches, they spend their lives in contact with the operations of other types of vessels, in addition to serving in them. It is because the navy sees the grave danger that may accrue through being dependent for its aerial arm upon another service that it is calling so loudly for a change. It is perhaps fair to say that they see the whole picture whilst the air service is looking skyward.

Cooperation with the navy is but an incident in the airman's career. He is with it but not of it, and his loyalty is placed elsewhere. It is the same with the staff at the Air Ministry, who can not be blamed if they place the independent functions of their arm first. Meanwhile, it is clear that the navy must have full provision for an aerial attack and defense, and that its aerial arm must be welded into the great fraternity of capital ships, cruisers, destroyers, and submarines.

BRITISH FLYING WORKSHOP.

19 August, 1922.

There is now being built for the Air Ministry the first flying workshop that has ever been constructed in this country. The object of this machine, which has a very roomy fuselage, is to carry spare parts with operating fleets of aircraft. The machine is fitted

with four engines. There is space for nearly three tons of freight in the fuselage and, in addition to spare parts, machinery will also be carried for making minor repairs.

The first of these airplanes is now undergoing tests by the Bristol Co., by whom it has been built, and it is probable that this machine will be allotted to the Royal Air Force in Irak.

STATUS OF BRITISH AIRCRAFT CARRIER.

14 August, 1922.

On August 9, 1922, the Marquess of Graham published a letter in the Morning Post in regard to battleships and aircraft. The substance of this letter was that the British Navy's great need at present was for airplane carriers, and he suggested that the Admiralty should build at once at least three large aircraft carriers, of lower freeboard than the *Argus* and with greater speed and other improvements, with at least 30 airplanes attached to each carrier, and with the whole complement in personnel—whether for air or sea service—belonging to the navy proper. After the airplane carriers to the above extent had been provided for, he said that post bellum battleships should then be built to suit the purse.

In reply to this letter, the naval correspondent of the Morning Post of August 11, 1922, published the following statement, which is correct:

In view of the letter from the Marquess of Graham, published in these columns on Wednesday, it seems desirable to set forward the position in which the Royal Navy stands to-day in regard to aircraft carriers, built and building.

Aircraft carriers are the only type of vessels, besides capital ships, the total tonnage of which is limited by the Washington Naval Treaty; it being laid down that the total tonnage for aircraft carriers of each of the contracting powers shall not exceed: United States and British Empire, 135,000 tons each; Japan, 81,000 tons; France and Italy, 60,000 tons each. Replacement of existing tonnage is also provided for, but with the special proviso that all aircraft carrier tonnage in existence or building on November 12, 1921, shall be considered experimental, and may be replaced, within the total tonnage limit prescribed, without regard to its age.

A further clause fixes the maximum displacement of any one aircraft carrier at 27,000 tons; but the contracting powers are permitted to convert ships which otherwise would be scrapped under the provisions of the treaty with aircraft carriers up to a tonnage of 33,000 tons for each ship so converted, without increase of total tonnage allowed. The United States are converting two of the six battle cruisers which are now building under this arrangement, the remaining four being scrapped.

Result of Premature Building.

All the aircraft carriers belonging to the Royal Navy, built and building, fall under the experimental category. There are completed and now in service the *Argus*, *Pegasus*, and *Ark Royal;* of which the first alone can be regarded as in any sense constituting an ocean-going aircraft carrier, the other two being makeshifts. Two carriers, *Eagle* and *Hermes*, are on the point of com-

pletion, and should be passed into service during the current financial year. The former is a convert battleship, the *Almirante Cochrane*, taken over by the Admiralty when in course of construction for the Chilean Government by Armstrong's. She is of 22,790 tons displacement, and has a speed of 24 knots. *Hermes* is a smaller type of vessel, specially designed by Sir E. Tennyson d'Eyncourt, and has a displacement of 11,000 tons, with a speed of 25 knots. Finally there is the *Furious*, originally a 31-knot cruiser of 19,000 tons, converted into an aircraft carrier during the war, in which rôle she did good service with the Grand Fleet in 1917–18. This vessel is now undergoing reconstruction at Devonport, a sum of £300,000 having been voted for that purpose in the navy estimates, 1922–23. She will not, however, be completed until 1923–24.

Aircraft carriers for service with the fleet are yet in their infancy. Much experiment and experience under all conditions to be met with at sea is necessary before the ideal carrier can be designed; although at present the British Navy is far in advance of any other Navy in this respect. It would seem, therefore, that the Admiralty policy of experimenting mainly with converted vessels is the correct and most economical course to follow, having regard to the lead possessed in this type of vessel and the "experimental clause" of the naval treaty referred to above. To sink several millions prematurely in building new vessels which, when completed, would very probably not embody the features which progressive experiments would demonstrate were necessary, would handicap the Royal Navy during the whole period that the naval treaty remains in operation.

DE HAVILAND LONG-DISTANCE BOMBER.

11 August, 1922.

The De Haviland Aircraft Co. (Ltd.), of Stag Lane, Middlesex, is building a new long-distance bombing airplane for the Air Ministry. This long-distance bomber is being constructed under the same specifications as the Avro "Aldershot."

The bomber under construction is to be called the *D. H. 27*. It is to be equipped with a 650-horsepower Rolls-Royce "Condor" engine. Bomb compartments are constructed in the fuselage to carry twelve 200-pound bombs hung vertically, six in each compartment, and in addition two 500-pound bombs carried horizontally on the bottom of the fuselage alongside the bomb compartments.

The *D. H. 27* is to carry a crew of four, the pilot, observer, bomber, and gunner.

The pilot and observer's cockpit is in the same position as that employed in the *D. H. 29*, described in "Jane's All the World's Aircraft," 1922; this position gives an excellent field of vision forward and downward. Visibility to the rear, however, is extremely poor, as the center section of the top wing, in which has been placed a fuel tank, slightly overhangs the pilot and observer's head. The bomber's compartment is similar to that described in the Avro "Aldershot." The same sighting facility is provided for the bomber,

which is thought to give insufficient vision. When this was mentioned to the designer he agreed, but stated that his hands were tied in the matter as it was the opening prescribed by the Air Ministry. The gunner's cockpit is well back in the fuselage, from which position an extremely good view and field of fire is obtainable.

The wings of this machine have a span of approximately 64 feet and are so constructed as to permit folding. In the center section is placed a fuel tank. Fairing around this tank joins on to the top of the fuselage. As gravity feed is to be employed, this was deemed the best possible location for the gravity tank, into which is pumped fuel from the main tank in the fuselage.

Two wheels are employed on the landing gear, which is of very wide gauge. The landing struts for each wheel are located at the outer edge of the center section, the point at which the wings fold. The shock-absorbing device consists of compressed rubber disks in two steel tubes. This was said to be experimental, it never having been employed by the De Haviland Co. previously.

The ailerons are on the top wing only. Ball cranks are used for the operation of the ailerons which gives a differential movement to these surfaces, so that in any movement the aileron moving upward moves through a greater angle than the one moving downward. This has been found to be very successful on the *D. H. 34* commercial machine.

It has been learned that the *D. H. 29*, a 10-seater monoplane, is to have the fuselage completely redesigned, as its former design blocked the slip stream in such a manner as to prevent proper control with the elevators. This redesign has not started to date, however.

The De Haviland Co., in addition to construction, conducts the only civilian pilot training school in England. They also operate two trips weekly between Lympne and Ostend, and one trip weekly between London and Manchester. For 2 shillings per mile traveled a *D. H. 9c* biplane, carrying three passengers, may be employed for any trip desired. This covers the complete cost of the pilot, fuel, and various other expenses, in addition to providing a reasonable profit. This company is operating without a subsidy and making money because of the efficiency of their organization and the types of airplanes used.

ALL STEEL BOMBING PLANE.

21 August, 1922.

The first all-steel bombing airplane in the world is to make its first flight at Norwich.

This airplane, which is British throughout, has been designed by Mr. J. D. North, of Messrs. Boulton & Pauls, and has been con-

structed at their works in Norwich. The entire machine, with the exception of the canvas wing covering, is built of steel, and it is claimed that it shows a great advance over the German all-metal airplanes, which are constructed of an aluminum alloy which lacks the strength of British steel.

Some remarkable results have been obtained by the ingenious methods of constructing this all-steel airplane. The steel skeleton of the machine was, when erected, actually 10 per cent lighter than its counterpart in wood, but, owing to the extra fittings necessary for securing the canvas wing covering, the advantage of weight of the completed machine over a similar airplane in wood was reduced to 4 per cent. It is, however, expected that with the experience gained on this first experimental airplane this advantage will be greatly increased in future machines.

Two Napier engines developing nearly 1,000 horsepower are fitted to the airplane, which, although designed as a fast long-distance bomber, has the maneuverability of a tiny fighting scout a result attained by the strength of the steel construction allowing all weights to be grouped close together.

The great advantages of all steel construction, apart from greater strength and increased load-carrying capacity, owing to saving in weight, are lack of deterioration in store, the ease of mass production at short notice, and the fact that it is less vulnerable to bullets and shrapnel while in flight.

EXPANSION OF ROYAL AIR FORCE.

1 September, 1922.

Before adjourning on August 4, 1922, Parliament authorized the expansion of the present establishment of the Royal Air Force by 20 squadrons, designated for home defense. The press has made considerable of this expansion and has made a great many exaggerated and unfounded statements, as is usual in such cases. The best authentic statement of the status is that given to-day by an officer of the Air Ministry to the following effect.

The authorized expansion of 20 squadrons represents the biggest and first step of the general scheme of expansion in the Royal Air Force. The designation for home defense was permitted in order to lend assistance to the advocates of the bill before Parliament, and it is not contemplated that this designation will prevent the squadrons being ordered to any duty which may be selected for them in the future.

The question of types of planes to be issued has not been settled, and, along with the question of supplying the necessary officers and men, is presenting considerable difficulty to the Air Ministry

authorities, and will probably be presented to the next Parliament for additional appropriation, which could not be asked at this Parliament, on the theory that it was best to get one thing at a time and then use that as a stepping stone to the next thing.

As regards types of planes, while no definite decision has been arrived at in the Air Ministry, about eight of the leading manufacturers in England have been notified that they may expect orders. The names of these manufacturing concerns are not announced, except that the Gloucestershire Aircraft Co. and the Blackburn Aeroplane & Motor Co. are known to be on the list. This infers that the Gloucestershire Co.'s scout plane known as *Mars* and the Blackburn torpedo plane will be among those designated for equipping the squadrons.

The assignment of squadrons in the home-defense areas has not been decided, but it is known from the above officer's statement that, due to pressure from the navy and advocates of the navy, some of the squadrons will be equipped with naval planes and assigned to naval cooperation work. Others will be assigned to army cooperation work, and probably elected to some of the different principal commands, as, for instance, the Aldershot command.

The officer stated that it was at present contemplated in the Air Ministry that it would take a period of two to three years to arrive at a concrete solution of the problem of the expansion and the full equipment of the new squadrons. The problem of personnel, especially officer personnel, is formidable at present, because it is almost unanimously agreed amongst the Air Ministry authorities and flying officers that the scheme which has been in operation since the armistice of issuing short-service commissions to officers has not been satisfactory and will not be attempted again if avoidable. It appears that the Air Ministry will have to wait for a sufficient covering appropriation from the next Parliament before being able to proceed definitely with commissioning officers and recruiting personnel up to the newly required strength.

As regards the number of personnel, the Air Ministry is not limited to a fixed number by Parliament, but may employ any number as long as the pay does not exceed the money appropriated, and the money appropriated is subject to a certain amount of juggling, so that the limit of personnel is fixed by the amount of pay required and the amount of money the Air Ministry can find to cover this pay.

The question of numbering the newly authorized squadrons is presenting considerable difficulty. A scheme has been put forward for renewing some of the numbers of the more prominent war organizations, a great many of which numbers were canceled with demobilization. This scheme found favor with the Air Ministry authorities,

but immediately pressure was brought to bear from innumerable old-time squadrons, and it will rest with the Air Ministry authorities to designate which of these squadrons will be selected. If carried out as now proposed there will be no systematic connection between the new squadron numbers and the present establishment.

BRITISH NAVY STILL FIRST LINE.

10 August, 1922.

Sir Philip Watts, adviser on naval construction to the Admiralty, is of the strong opinion that the construction of the two new battleships already decided upon should be proceeded with. He does not think that anything has happened to justify a reversal of the decision to lay down these two new battleships. Although it is quite true that many fresh considerations have arisen as a result of war experience, by taking certain defensive measures there does not seem to be any need for pessimism concerning the future utility of the capital ship. She should meet torpedo attack, structurally, by increased subdivision and by increased stability. By increasing the subdivision and by adding to the water-tight compartments you minimize the effect of the torpedo, and by increasing the stability of the ship you prevent its rolling to the extent which now takes place, and consequently lessen the chance of having her unprotected bottom exposed to attack.

So far as attack from the air is concerned, it is a fact that you can drop a bomb that can be fatal to the ship, but the chances of doing so are, in his opinion, very remote. If a direct hit is obtained—which would not be quite so easy under war conditions as in maneuvers—he doubts whether the damage would be vital. It might blow the upper works away, but he doubts if the velocity of the bomb would permit penetration of the 4-inch armor plate used on the deck as a protection. As to the other method of dropping a big bomb alongside a vessel, such a feat under war conditions seems to be almost an impossibility. Supposing, however, the bomb came within 20 feet, it might give the ship a good shake up, but he does not think it would sink her.

He thinks that for some years to come a ship can be regarded as reasonably safe against attack, and for that reason the construction of the two new vessels should proceed. Nothing has happened yet to make the navy lose its position as the first line of defense; at the same time the air is becoming increasingly important, and preparations there should be of the most adequate character.

BRITISH DOMINIONS AND NAVAL DEFENSE.

24 August, 1922.

The Admiralty's suggestions regarding New Zealand's naval development are commented on by the naval correspondent to the Morning Post as follows:

The governing idea is that during the period of financial stringency, which is affecting the Dominions as it is this country, the organization of Dominion navies should be such that they are capable of rapid expansion when times improve. The basis of this organization is a seagoing squadron, while the means of expansion are light cruisers and ocean-going submarines. The Admiralty further suggest that all reserves should be supplied locally, and that the necessary provision for the local squadron in the matter of bases, docks, reserves of stores and fuel should be made. Trade protection, in so far as it concerns local waters, is another responsibility which the Admiralty are seemingly desirous of delegating to the Dominions, to which end it is suggested that storage for guns for defensively armed merchant vessels, together with trained personnel for their operation and to form the crews of escorting vessels, should be provided by the Dominions. The elaboration of the mobile defense of ports, including mine-sweeping organization, completes the purely local measures that have been suggested.

Increasing mobility.—In the matter of the wider imperial sphere the idea is that the Dominions should assist financially, or by the provision of material, toward equipping the Empire with naval bases. The suggestions, therefore, fall into two clear divisions, local and imperial. They also appear to have been framed with a definite strategical object in view, and mark a considerable advance in the putting forward of clear-cut principles.

This is not the time to discuss the question of local navies as opposed to an imperial navy; but it is possible to infer from the Admiralty suggestions what is the strategical object they have in view. To take first the imperial sphere—the equipment of the Empire with naval bases. This is no doubt aimed at increasing the mobility of the navy as a whole, and rendering it eventually possible to move rapidly a large force to any threatened quarter of the Empire, and to maintain it there for a prolonged period if necessary. At present, owing to a lack of fully equipped naval bases and fueling stations outside home waters, the mobility of the fleet is very seriously prejudiced and a grave risk is thereby incurred.

But, however mobile our main fleet, circumstances are conceivable which might render it necessary for the Dominion naval forces, aided by such squadrons of the British Navy as were on the spot, to deny to an enemy the control of local communications until such time as the main fleet could arrive and occupy a strategical position from which it could either contain the enemy's main fleet or bring it to action. The action of the local forces under these conditions would necessarily be of a delaying character. Indeed, it could be no more.

A fleet in being.—There is but one form of naval force which can adequately perform the function of delaying a superior force in the attainment of its object which may be assumed to be the control of local communications for invasion or other purposes—a fleet in being. A "fleet in being" may be defined as "a fleet strategically at large, not itself in command of the sea, but strong enough to deny that command to its adversary by strategic and tactical dispositions adapted to the circumstances of the case." The submarine, owing to

its power of submerging at will, is capable of maintaining itself strategically at large under conditions which would inevitably require a weak fleet, composed only of surface craft, to shut itself in a defended harbor in order to avoid annihilation.

On the other hand, submarines can only remain strategically at large until such time as the other side have developed fully their countermeasures. But that takes time, and time, in the case under discussion, means everything. It also follows that the greater the radius of action of the submarines, the longer before the full force of countermeasures can be applied. Therefore, for a modern fleet in being or delaying force, ocean-going submarines with long range are preferable to small submarines tied down to coastal waters. In addition, until his countermeasures are in full operation, they, in conjunction with air craft, prevent an enemy establishing himself within easy striking distance of his objective. Considerations such as these have, no doubt, influenced the Admiralty in urging on the Dominions the employment of ocean-going submarines.

The suggestions regarding local protection of trade, bases, docks, and mobile defense speak for themselves and do not require elaboration.

An urgent need.—The Prime Minister of New Zealand is reported as having said that in present conditions it was impossible to do everything, but they must make a beginning. Evidence of this good will is forthcoming in the report that a sum of £400,000 is to be spent on naval defense next year, but it must be admitted that this will not go very far in meeting the Admiralty suggestions. Australia, on her part, has been drastically pruning her navy. There are now in full commission only three light cruisers, one flotilla leader, two destroyers, and a sloop. All the six *J* class submarines belonging to Australia have been paid off, together with nine destroyers. It will be recognized that, under such conditions, any form of combined training of all arms is out of the question.

Canada has gone to the length of paying off the whole of her seagoing squadron, consisting of a light cruiser and two destroyers. The latter will be kept in reserve, but Canada's active navy is now represented only by four trawlers, two on the Atlantic and two on the Pacific coast. These trawlers are to be used for training Royal Naval Volunteer Reservists. South Africa, of course, has only just made a beginning. She, too, is concentrating on the enrollment and training of R. N. V. R., and has two trawlers and a sloop for the purpose.

It is obvious, therefore, that a very great deal remains to be done before we can have an imperial naval organization on the lines suggested by the Admiralty. That the need for it is urgent and pressing nobody who has studied the situation will deny; but it seems that it will not be brought home to the great bulk of the people at home and in the dominions until the case is put fairly and squarely before an imperial conference on naval defense, which should be called without delay.

BRITISH MEDICAL OFFICERS' CASE AGAINST ADMIRALTY.

14 August, 1922.

The British Medical Association has placed what amounts practically to a ban on the Admiralty owing to the manner in which senior surgeon-commanders of the navy are being treated. It has

decided to advise recently qualified medical practitioners to consider seriously the disadvantages to which they are liable if they place their careers in the hands of the Admiralty. The case against the Admiralty has been fully set forth in the British Medical Journal, in which it has been forcibly suggested that the Admiralty has been guilty of a breach of contract.

In January, 1920, as a consequence of the report of the Jerram-Halsey committee, new regulations for retirement came into force in the Royal Navy. It was at once seen that a great injustice had been done to a considerable number of surgeon-commanders who were nearing or who had passed the new retiring age of 50. The grievance arose under two heads—age of retirement and rate of pension. Under the new regulations these medical officers were compelled to leave the service from one to five years earlier than would have happened under the original terms of their appointment.

The effect of this was to penalize the senior surgeon-commander in two ways. In the first place he was deprived of several years of service at a higher rate of pay, and in the second place his chances of promotion to higher rank—and therefore of increased pay and pension—were correspondingly diminished. A special hardship was inflicted on those officers who, when making provision for old age, had taken out endowment policies to mature at the normal age of retirement; they found themselves saddled with heavy insurance premiums, which had to be met out of a halved income. Again, the Jerram-Halsey committee had recommended increases of retired pay for all branches. Under the new regulations the officers of other branches got increases of pension varying from 26 to 100 per cent. Thus these medical officers, who had entered the service on the understanding that they would be allowed to serve until the age of 55, were compulsorily retired at 50, and their maximum pension was fixed at an increase of but 10 per cent on the former retired pay of their rank.

After more than two years' pressure the Admiralty have given an assurance that in no case shall the retired pay of a surgeon-commander, who was on the list on July 1, 1919, be reduced below the old maximum of £547 10s., but the main injustice still operates. So far the Admiralty have refused to concede as generous treatment to these medical officers as to the executive and other officers, with the result that the British Medical Association has issued a warning to the medical students and young practitioners, and has announced that it intends to reiterate its advice on all suitable occasions.

RED SEA SLAVE TRADE.

10 July, 1922.

Reports indicate a marked increase during recent months in the Red Sea slave trade. Numerous dhows loaded with slaves are constantly arriving at the Idrissi ports of Hodeidah, Medi, and Ghizan. There were also unusually large arrivals of slaves at Jeddah this season in connection with the annual pilgrimage. Prices there ranged between Rs. 300 for a male and Rs. 400 for a female.

The British authorities are making every effort to check the traffic, but have during the past month only succeeded in capturing one dhow, under circumstances which warranted confiscation. There is so much slave blood among the coast populations that the defense raised by the dhow owners that the slaves are passengers is not always easy to disprove, because the slaves themselves are too demoralized to give evidence against their captors and in appearance they closely resemble the coast populations.

The slaves are nearly all of Abyssinian origin and are secured by the wholesale raids, which have been depopulating the southern regions of the country for some years. They are smuggled out through French Somaliland and the unguarded Dunkali coast of southern Eritrea. Several shipments are known to have originated at Tajura, in French Somaliland. It is not known whether the French authorities are actually conniving at the trade, but they are at least displaying great laxity in this respect, as well as in the clandestine arms trade to Mokha and Khokha.

MOTOR SHIPS SUPPLANTING STEAMSHIPS.

30 September, 1922.

In spite of the severe shipping depression, motor-ship tonnage (full-powered ships 2,000 gross tons or over) increased 37 per cent in the year ended June 30, 1922, as against a gain of only 4 per cent for steam tonnage exclusive of motor ships, according to an analysis of shipping released to-day by the transportation division of the Department of Commerce.

On June 30, 1921, there were 145 motor ships of 2,000 gross tons or over, aggregating 692,000 gross tons; on the same date this year there were 186, totaling 946,000.

The United Kingdom continues to lead with 36,000 tons, an increase of 24 per cent. Sweden registered a large percentage gain, but continues in third place. Norway has displaced the United States as fourth on the list. Germany, which did not have enough motor-ship tonnage to appear separately in the list last year, has

seven vessels aggregating 32,083 tons this year. Danzig has two ships of 12,078 tons; one of these in the *Zoppot* of 9,932 tons, one of the largest tankers in the world.

The above totals are for what may be termed seagoing ships. In addition to these are 605 vessels under 2,000 tons each, aggregating 234,325 tons, equipped with Diesel engines. Last year on the same date there were 553 vessels of this kind, totaling 216,110 tons.

The chief engineer of one of the largest British shipyards stated two years ago that he saw a promising future for sailing ships with auxiliary Diesel engine power. This kind of tonnage has increased from 45 ships, totaling 13,000 tons on June 30, 1915, to 777 of 342,530 tons in 1921, and to 870 of 353,181 tons in 1922. The United States holds the lead in this kind of tonnage, with 54 ships aggregating 50,957 tons.

AMMUNITION SUPPLIED IRISH FREE STATE.

5 August, 1922.

It has been ascertained through a most reliable authority that a good deal of the ammunition used by the Free State troops in Ireland was ordered from the great British explosive firm Nobel. The amount of ammunition was ordered by Winston Churchill, the Colonial Secretary, from the Nobel people, to be ready at a certain time, without advising them for whom this ammunition was intended. As soon as the ammunition was ready, Mr. Churchill gave Nobel the order to deliver it to the Free State Government. It is unquestionably true that the British Government paid Nobel, but what arrangement they have for collecting the same from the Free State Government can not be ascertained.

POLITICAL CONDITIONS IN CHILE.

22 August, 1922.

The political conditions in Chile are extremely chaotic. A few weeks ago the Premier and Minister of the Interior, Señor Jaramillo, was defeated decisively at the polls in his contest for reelection. He thereupon promptly resigned and his resignation was followed by that of the rest of the cabinet. Up to the present time, the President has been unable to form another cabinet.

About 10 days ago a vote of censure was passed by the Senate, on the Minister of Foreign Affairs, Barros Jarpa, for his conduct and the method by which he handled the negotiations in Washington between Peru and Chile. The vote of censure passed the Senate by 20 to 7. Previous to the vote being taken, Barros Jarpa made a most dramatic and impassionate appeal in which he said he recognized the fact that the conservative reactionary element in Chile

demanded a sacrifice and that he understood perfectly that he had been the man elected for it. His speech was so applauded by the spectators who crowded the Senate chamber that the president of the Senate cleared the gallery. It was a very dramatic moment.

On the 18th instant, Señor Tocornal, the ex-premier, consented to attempt to form a cabinet. For a few hours it looked as if he might be successful in his efforts, but he finally failed, and his failure has been accredited to the fact that he was not sure that he would be able to force the ratification of the protocol of Washington through the Senate and Chamber.

The situation was further complicated by the death, yesterday morning, of Senator McIver, the leader of the Radical Party, and probably the most influential man politically in Chile. Until his funeral, there will probably be no further attempts to form a cabinet.

Whether or no the protocol will finally be ratified within the specified time of three months seems to be a very mooted question. The general opinion of most people who have followed the course of events, and understand the Chilean people, is that it eventually will be. In my best judgment of the situation, which is liable to change, and is changing every day, the protocol will not be ratified. The Senate, in passing its vote of censure on Barros Jarpa, the originator of the plan by which Peru and Chile met in Washington, specifically mentioned in the resolution that nothing in it should be considered a repudiation of the protocol itself. Still, it must be taken into consideration that this vote of censure passed by a very large majority and that before it was passed Barros Jarpa was generally considered the most popular and well-liked statesman in Chile. For that reason, I do not see how they can obtain enough votes to change the very illogical situation in which the Senate would find itself if it now ratifies a treaty after publicly condemning its originator, but there is this to be considered, and that is that the attack against Barros Jarpa may have been made simply as an attack against President Alessandri, who seems to be becoming more and more hated and disliked by all politicians, irrespective of party.

During the last three weeks, he has broken all Chilean precedence and has commenced an active propaganda campaign and appealed direct to the people through articles written over his own signature, in newspapers, for the ratification of the treaty.

CHIHLI-FENGTIEN FIGHTING OF 1922.

25 August, 1922.

In summarizing the Chihli-Fengtien fighting of 1922 one must first of all deal with the two leaders, Wu Pei-fu and Chang Tso-lin.

Wu Pei-fu.

Wu Pei-fu, 49 years of age, has a Chinese B. A. degree and received his military training at Chinese military schools. He has worked up through the company officer grades to his present position because of his success in handling his various commands. He has campaigned in the Province of Shansi, Szechuan, Hunan, Hupeh, Honan, and Chihli. He has participated in more active military operations than any other man in China. During all this time he has been in or in command of the third division, of which he is still the division commander.

Wu Pei-fu became more active politically in 1920, when he withdrew his troops from southern Hunan to Honan and Chihli. In making this change of station he was instrumental in helping the Hunanese drive the rotten Tuchun Chang Chin-yao from the Province. Later the same summer Wu took matters in his own hands again and fought the Anfu troops south of Peking, driving the Anfu clique, Tuan Chi-jui, and his followers from their predominant position in Peking official circles. (See M. A. Report 2609, August 3, 1920.)

With his victory complete and with no opposing troops between him and Peking, Wu in 1920 refused to enter the city. He contented himself with having driven from power a group that, as he expressed it to his soldiers, were not working for China but for Japan. Wu returned to Loyang and devoted his time to training his own third division.

In 1921 Wu strengthened his position and became a political figure by frustrating the attempts of the Szechuanese and Hunanese, the latter led by a group of fortune hunters, from getting control of Hupeh. Wu gained control of the Hanyang Arsenal, became inspector general of Hunan and Hupeh, which, together with his position as assistant inspector of Chihli, Shantung, and Honan, where he dominated his nominal superior, Tsao Kun, gave him control of all troops from the Kwangtung border to the Yangtze River and the territory along the entire Peking-Hankow Railway line. As Chang Tso-lin exerted a preponderate influence in Peking, Wu, in spite of his stronger position, found great difficulty in obtaining funds to pay his greatly increased command. Hupeh was forced to pay for its delivery from the hands of Chang Tso-lin. Wu, since his arrival in Honan, had always forced Tuchun Chao Ti to furnish some funds for his troops. Now the same thing was done in Hupeh; the receipts of the Hankow Chengchow section of the Peking-Hankow Railway were taken, as well as postal, telegraph, and certain salt revenues. Chang Tso-lin continued to draw millions from the Peking government, while Wu was forced to shift for himself.

During the spring of 1921 at Wu's insistence Chihli troops were sent into Shensi, and the notorious Tuchun Chen Shu-fan was driven out. In due time Feng Yu-hsiang, the Christian general, became Tuchun of Shensi. As Feng had always been a supporter of Wu, this gave Wu another Province to his credit.

In the autumn of 1921 the Chihli Cabinet of the then Premier Chin Yung-peng went on the rocks. Chang Tso-lin was invited by the President to come to Peking to assist in selecting a new cabinet. In due course of time Liang Shih-yi, a leader of the "Old Communications clique" (Chiaotung clique), was made premier. Chang Tso-lin and the Chiaotung clique were in control. These political financiers lost no time in laying plans to restore the credit of the Banks of China and Communications controlled by the Communications cliqüe. The old Anfu crowd were pardoned their offenses in return for their financial assistance.

Wu Pei-fu threw the Communications crowd into a panic by issuing numerous circular telegrams accusing Liang Shih-yi of working with the Japanese in settling the Shantung question and in pardoning the Anfu offenders whom he had driven from office. The outcome of it all was that Wu forced Liang Shih-yi to take a "sick leave" in Tientsin. Wu also turned his telegraph batteries on the ministers of communications and finance who were of the Chang Tso-lin-Liang Shih-yi group. They, too, gave up their jobs.

Naturally Chang Tso-lin, Liang Shih-yi, etc., became rather peeved at Wu. In addition they quite naturally were sore at President Hsu Shih-chang, for with Wu's outspoken opposition the President adopted his usual method of playing both ends against the middle. Hsu's military power was nil outside of Peking, so the real problem was to get rid of Wu Pei-fu.

The old Anfu crowd were called in; Tuan Chi-jui was persuaded to leave Peking for Tientsin. Thus the Anfu group, the Communications groups, and Chang Tso-lin in the north were combined to eliminate Wu Pei-fu, while in the south Sun Yat-sen and his followers wished for Wu's destruction, as it was his troops south of the Yangtze that were sure to oppose the advance of any "northern expedition."

With the above groups controlling the Peking government, the banks of the country and more troops than Wu Pei-fu, Wu found himself in danger of being squeezed out of China.

Wu has always had the reputation of being a fighter. For driving the Anfu group out of Peking he received the approval of the Chinese people. The results of his 1921 campaign increased his military prestige, but lost him much popular support in the Yangtze Valley. He has always made it a point to confide in his sub-

ordinates and has always made his soldiers feel that they were fighting for their country as well as for him and that, although they were never paid up to date, they would get their money when he received any.

Chang Tso-lin.

Chang Tso-lin is about Wu Pei-fu's age (49). He received no education in his youth, became a bandit leader in Manchuria and fought with his bandits for Japan in the Russo-Japanese War. After the war he surrendered at the request of Japan to the Chinese Government and received quick promotion. He became military governor of Fengtien (Mukden) Province in 1911. The size of his military command constantly increased until in 1921 he commanded well over 100,000 men, had absolute control of all Manchuria, was also inspector general of inner and outer Mongolia and the military districts of Jehol, Chahar, and Suiyuan. He was in 1920 and 1921 the largest factor in dictating the politics of the Peking government. He was able to force the Central Government to furnish him practically all of the funds allotted to the military. He supported Yuan Shi-kai until the latter's collapse, assisted Tuan Chi-jui in putting down Chang Hsun's attempt to restore the monarchy and sent some brigades to assist Wu Pei-fu in defeating the Anfuites in 1920. Prior to 1922 he had never attempted to carry on a campaign on a large scale. With his political success Chang had become one of the financial powers of China. He had established an apparently sound financial system in Manchuria. By playing a give and take game with the Japanese he was able to obtain from them the assistance, support, and materials he needed by giving them concessions, etc., that they desired. He has been accused of being a tool of the Japanese. His ambition for power has certainly forced him to deal with them beyond the point that he would if he were working only for the interests of his country. This same ambition has caused him to turn his attention Pekin-ward rather than in the opposite direction, where banditry has always been rife in northern Manchuria and where the Chinese Eastern Railway, the life line of his two northern Provinces, has needed his support.

As stated above, Wu Pei-fu's telegrams which led to Liang Shi-yi's departure from Peking in January, 1922, spoiled Chang Tso-lin's game and led to Chang and Liang Shi-yi being double crossed by President Hsu. So Chang Tso-lin, Liang Shih-yi, and his Communications group, the Anfuites and the Canton government were all against Wu as representing the military force that opposed them. They also were incensed against President Hsu, but in this respect they did not differ from Wu Pei-fu.

In February, 1922, there was much scheming by Wu's enemies as to the best means to get rid of him. Chang Tso-lin sent a delegate to Canton to get in touch with the Canton government. C. C. Wu, son of Dr. Wu Ting-fang, went from Canton to Mukden to return the visit, and is reported to have returned to Canton with $3,000,000 furnished by Chang and other enemies of Wu. The southern government propagandists all spoke of the northern expedition of Sun Yat-sen. Doctor Sun has stated that this expedition was supposed to start north early in the spring in order to draw Wu Pei-fu's attention to the south so that Chang would find Wu's forces divided. For very good reasons the expedition never left Kweilin in Kwangsi.

Thus at the beginning of March, 1922, we find the opposition to Wu Pei-fu very pronounced among the political leaders who belonged to or could be influenced by Chang, or any of the groups whom Wu had ever opposed. In addition to those in Peking, Tientsin, Manchuria, and south China were the Chekiang, Anhwei, and Honan officials. Shantung was inclined to be neutral. Kiangsu inclined toward Wu Pei-fu but not to the point of coming out openly in his favor. Money was plentiful among the anti-Wu crowd, while Wu, with little money in his pockets, was obliged to use other means to hold his supporters. Having held actual command of large numbers of troops during the past years the commanders of these troops were in a position to know him thoroughly, his military ability and his motives. He, on the other hand, knew them intimately, knew whom he could trust, and the military efficiency of each leader and his organization. Early in March it was announced that Feng Yu-hsiang, "Christian General," Tuchun of Shensi, had left his Province with a large force and was marching to Wu's assistance. Feng, with two divisions and one mixed brigade—25,000 troops—arrived at the rail head just in time to be forwarded and play an important part in the outcome.

Campaign of 1922.

Chang Tso-lin started moving troops into Chihli Province from Manchuria early in April. Whether he really expected to fight is doubtful. His dispositions were such that apparently his main idea was to surround Peking and maintain his line of communications thereto from Manchuria in order that he and his associates might force President Hsu from office and dictate to a new government as they might choose. So Chang's motives for fighting were to secure unhindered control of the Peking Government and in so doing eliminate the disturber, Wu Pei-fu. Wu's motives might be considered equally personal. Failing to fight, he ceased to play any part in Peking politics. He would get nothing from the Government and gradually his followers would slip away from him. If for either personal or patriotic reasons he expected to continue to play a part

in Chinese affairs he must fight. Chinese and foreigners alike who have ever known Wu believe he is a patriot and that his efforts are for patriotic rather than for personal reasons.

As to resources Chang Tse-lin had a well organized and united Manchuria behind him with 140,000 troops, of whom about 30,000 were already in Chihli. The Honan Tuchun, Chao Ti, with the bandit army of 25,000 men, was ready to join with anyone who could get rid of Wu Pei-fu. Chang had plenty of funds, military equipment, and credit. Wu's forces were scattered from Peking to Hankow and from there to Yochow in Hunan. Wu had more or less directly under his command available for service—

	Troops.
In Chihli Province	22,700
In Honan Province	10,000
In Human Province	13,900
In Shensi Province	[1] 40,000
In Hupeh Province	[2] 70,000
	156,600

Of the troops in Shensi and Hupeh not more than 50 per cent could be counted upon as available for service elsewhere. So that Wu Pei-fu had for active service about 101,000 men, the most of whom had seen active service under Wu Pei-fu during the past two years. With these troops Wu must fight Chang Tse-lin, fight if necessary Chao Ti in Honan, and protect the Yellow River Bridge north of Chengchow. The northern expedition of Sun Yat-sen apparently gave him no concern.

Battle of the Hun-ho.

Chang's troops moving down from Manchuria, took up a position across the Tientsin-Pukow line at Machang and extended this line in a general northwesterly direction through Liu li ho on the Peking-Hankow line. Chang's troops were south of the Hun-ho. The bulk of his troops were sent to his position along the Peking-Hankow and Tientsin-Pukow Railroads. His flanks were supposedly protected by cavalry, at least it was stationed there. Chang made no effort to attack Wu, but having taken up his position covering Peking and his rail communications his troops rested, apparently confident that Wu would not attack.

Wu outside of preventing Chang's further advance south by either the Tientsin-Pukow or Peking-Hankow Railroads did not interfere with Chang's movements. Chang having made his dispositions Wu deliberately brought up his own troops.

It might be pointed out here that all of Chang's troops were untried under battle conditions, while many of Wu's divisions and

[1] Under Tuchun Feng Yu-hsiang. [2] Under Tuchun Hsiao Yao-nan.

brigades had been through several campaigns under Wu during the past few years.

Wu evidently considered he must drive the Manchurian troops from around Peking to prevent Chang Tso-lin from dictating the policy of the Peking government. Furthermore, as the Peking-Hankow Railway line was Wu's line of communication he must protect it. He therefore decided to attack Chang's right flank. Wu placed some troops of doubtful military value on the Tientsin-Pukow line, but on their left (the right center of his line) he placed his own third division, probably the best in China. As Wu has been with this division for more than 20 years, he has implicit faith in its ability and loyalty. Its position was such that were it to attack successfully it might reach Tientsin and cut the railroad behind Chang's line. In the center and on the left of the third division was a brigade of the twenty-sixth division, of little value except to fill up the line. Still farther to the left (the left center) was the fairly reliable twenty-third division of Wang Ch'eng-pin, Wu's second in command. On Wu's left flank, through which ran the Peking-Hankow Railway and to which he gave his personal attention during the fighting, were the thirteenth, fourteenth, fifteenth Luchun, and fourth Honan mixed brigades, while one brigade of the eleventh division of Feng Yu-hsiang came up from the south to make the turning movement which caused the stampede of the Chang Tse-lin forces. From the incomplete information available it appears that Chang Tso-lin had four divisions, nine mixed brigades, and three cavalry brigades either in line or held close behind the line as reserves, about 84,000 men. Wu Pei-fu had four divisions, two brigades, and five mixed brigades, about 64,000 men.

Fighting opened on April 28 along both railroads. The twenty-sixth division troops (Chihli) near Machang on the Tientsin-Pukow line were practically annihilated. Other troops came up to replace them so that Chang's troops were held at Machang. A short distance west of Machang the Chihli troops were victorious, but the victory was not pressed. The further fighting on this flank had no bearing on the result of the campaign.

On the Peking-Hankow line the skirmish of April 28 was indecisive, but it was followed by a serious attack by Wu Pei-fu's troops on the 30th. Chang's forces retired slightly to a strong position around Changhsintien, an important railroad town, the holding of which secured the bridgehead over the Hun-ho.

From April 30 through May 3 the severe fighting seems to have been confined largely to the vicinity of Changhsintien, with Wu using his poorer troops unable to force Chang from his strong position. On the afternoon of May 3 one brigade of Feng Yu-hsiang's

eleventh division showed itself on Chang's right flank. Due to the usual lack of flank protection by the Chinese (a tactical weakness that Wu Pei-fu has taken advantage of in all of his campaigns of the past three years) this brigade was able to get well around behind Chang's right flank. An attack was made by this brigade at midnight in conjunction with a frontal attack on the Changhsintien position by two other brigades of Wu's. The result was the hasty withdrawal of Chang's forces on his right flank. They withdrew with little fighting back across the Hun-ho. The sixteenth division, the twenty-fifth mixed brigade, the cavalry and other troops on the extreme right flank were with few exceptions unable to find rolling stock to carry them away or else had no desire to get away. All idea of resistance disappeared and the troops that did not get away on trains or horses surrendered within 24 hours to Wu's forces or to the neutral first, ninth, and thirteenth divisions, stationed in and around Peking. The brigade of the eleventh division that turned Chang's right flank did so with practically no loss.

The route at Changhsintien spread to the First Fengtien Division to the left of the troops above mentioned. As this division was close to the railroad with headquarters at the railroad junction at Fengtai, they with practically all the other troops in that vicinity were able to board waiting troop trains and withdraw toward Tientsin. The stampede spread from right to left along the Tientsin-Pukow Railway. From the night of May 4, for 36 hours trains packed with tired, dirty, and hungry Fengtien soldiers poured through Tientsin. The railroad officials did their utmost to pass all troops through Tientsin as quickly as possible to minimize the danger of disturbances in the city. The foreign troops and the British and American volunteer companies occupied the lines in accordance with the defense plans of the foreign concessions. No trouble occurred, although the Tientsin police received the surrender of over 7,000 Fengtien soldiers, including the Second Heilungkiang Cavalry Brigade. Thousands of the Chang Tso-lin soldiers were unable to find trains on which to retire. Of the estimated 84,000 men who were in the line or in close proximity thereto about 25,000 surrendered, about 35,000 withdrew by train, and about 24,000 fled on foot, in carts, etc. Of the 24,000 a large proportion eventually made their way back to Chang Tso-lin's lines after he had halted east of Tangshan.

There is no evidence that Chang's troops were hurried by Wu in their withdrawal except on the extreme right and at Fengtai. It is true that all along the line great quantities of forage, food, ammunition, and supplies of all sorts were abandoned, but this was the result of fright rather than pressure from their rear.

As all rolling stock was taken, Wu found no means of following Chang's fugitives until his own trains from the Peking-Hankow line

could be brought over. As a matter of fact Wu Pei-fu seems to have been inclined throughout to give Chang the opportunity to withdraw without fighting. However, Wu did follow Chang's troops to Tientsin, arriving there on the night May 6–7, preceded by several thousand troops. Chang's forces seemed to catch their breath at Luanchow, about halfway between Tientsin and Shan Hai-kuan. Here they took up a strong position with advanced positions at Kuyeh and Kaiping. These latter were in the American sector of the railroad and in the Kailan Mining Administration's (British) mining area, and had fighting broken out there great damage might have resulted to the mining property. Wu's troops, moving forward very deliberately, again threatened Chang's right flank and he retired without fighting to Shan Hai-kuan just within the great wall, with outposts in advance, which outposts he gradually withdrew upon the advance of Wu's forces.

It is remarkable that with all the military operations practically no damage was done to the railroad. With Chang's withdrawal he took 90 per cent of the rolling stock of the Peking-Mukden Railway, but with the exception of the removal of a few rails and the partial destruction of a few small bridges no damage was done. This was no doubt due to the stress laid by the military commanders of both sides on the necessity of avoiding interference with foreign life and property.

From Wu Pei-fu's headquarters the following statement has been received as to captured supplies, prisoners, etc., during the fighting along the Hun-he:

Prisoners	[3] 30,000
Horses	3,000
Field pieces, various sizes	200
Machine guns	230
Rifles	10,700
Ammunition and grain	Uncounted.
Casualties, Chihli	3,000
Casualties, Fengtien	10,000

These figures are no doubt somewhat excessive, particularly the prisoners and Fengtien casualties.

It is interesting to note the effect the defeat on right flank caused by Chang's line of communications running behind and parallel to his front. Although many of the Fengtien troops were never engaged and none seriously defeated the moral effect was the same as though they had all been badly beaten. No attempt was made to withdraw a flank, hold the railroad, or fight a rear-guard action. Soldiers and officers had had enough of "war." This panic was

[3] Including 1,600 officers (this includes those who surrendered to the neutral troops and police).

carried from the right of the line to the left as the trainloads of fleeing troops moved along from right to left, allowing several hours for the news of the reverse to get from the railroad line forward to the front.

As this chapter on the Chang-Wu fight in Chihli closed another interesting one developed in Honan which, had it not been anticipated by Wu Pei-fu, might have seriously handicapped him.

The Honan Fight.

Mention has previously been made of Chao Ti who had been the usual type of Tuchum in Honan since 1916. Chao Ti and his brother Chao Chieh had been more or less held in suppression by Wu Pei-fu since the latter's arrival in Honan in 1920. Naturally the Chaos were willing to side with Chang Tso-lin if the chances of his success were good. The Chao brothers had about 25,000 poor troops, with headquarters at Kaifeng, the provincial capital, on the Lunghai Railroad.

Evidently the false telegram reporting the death of Wu Pei-fu caused the Chaos to decide to act so that they might be in the good graces of Chang Tso-lin at the finish. Consequently they sent troops to Chengchow, the junction of the Lunghai and Peking-Hankow Railways, a most important point for Wu. They also sent a force north to hold or destroy the Yellow River Bridge, 25 miles north of Chengchow, an even more important point for Wu to hold.

Anticipating trouble from this source Wu had ordered Feng Yu-hsiang, upon his arrival from Shensi, to remain at Loyang, Wu's headquarters, 130 miles west of Chengchow with the first Shensi division and one brigade of Feng's Eleventh Division, sending only one brigade of the Eleventh Division to Wu's assistance in the north.

At Chengchow and other points along the Peking-Hankow line were scattered detachments of the Eighth Mixed Brigade and the Twenty-fourth Division, both unreliable. On May 4 Feng went to Chengchow to inspect conditions and was assured that things were peaceful. However, after a private investigation he found that the Chao brothers had sent troops to take Chengchow. Hastily returning to Loyang he brought up the First Shensi Division and his remaining brigade of the Eleventh Division and after some fairly severe fighting finally drove Chao Ti, Chao Chieh, and their troops from the Peking-Hankow and Lunghai lines. Many of these troops have returned to their former occupation of banditry. Due probably to treachery of the Chao Ti commander rather than to the bravery of the defenders, the Yellow River Bridge was not damaged.

With the flight of Chao Ti and his following, Feng Yu-hsiang proceeded to occupy the yamen and to be appointed tuchun of Honan, a position more to be desired than that of tuchun of Shensi

and certainly a position where he can play a much more important part in the future events in China.

Fighting at Shanhaikuan.

After much talk of an armistice and after it was generally supposed that Chang Hsueh-liang with two foreigners had arranged an armistice with General P'eng Shou-hsin, commander of the Chihli advance guard, fighting broke out on June 10 all along a 5-mile front, the flanks of both armies resting on the sea to the south and in the hills to the north. The contraction of the fronts from approximately 100 miles in the Hun River battle to 5 miles at Shanhaikuan naturally caused a greater concentration of troops. The Chihli forces pressed the attack and although held to insignificant gains on the flat ground between the railroad and the sea started another enveloping movement around Chang's right flank. Although defeated once and forced to withdraw a second time, due to lack of protection of his right flank, Chang again failed to make the necessary dispositions to defeat the obvious attack. Chihli reinforcements of artillery and infantry as they arrived were all sent to assist in the enveloping movement which was never stopped and which eventually would have caused the surrender or hasty flight of the Fengtien troops at Shanhaikuan had not an armistice been signed on June 18 on board the British gunboat *Curlew*. By the terms of the armistice Chang Tse-lin withdrew beyond the great wall within five days. Probably the total casualties for both sides in this fight amounted to about 5,000 in killed and wounded.

Another Chihli column had been advancing for many days over the old Manchu road through Jehol to Manchuria. At the time of the signing of the armistice this force is said to have reached Chaoyang and where they again threatened Chang's rear.

There is little of military value to a westerner to be learned from the fighting. The force which had the better discipline and the offensive spirit was successful.

FOOD.

As has been pointed out in previous reports on the military operations of the Chinese, the rationing of troops is a very simple matter, so simple in fact that inferior officers often neglect it entirely. The ignorant soldiers are then cursed and blamed for looting food shops, etc. These are by no means the only occasions when the Chinese soldiers loot, but undoubtedly there are a great many times when the proper attention to their duties by the officers would prevent looting. To return to rationing the soldiers, with rice, an occasional vegetable, some Chinese bread, a bit of tea the soldiers will go on indefinitely. Meat is almost never a part of the Chinese soldier's ration.

MUNITIONS.

There was nothing new shown in the way of arms and equipment. Nearly all of Wu Pei-fu's arms and ammunition was Chinese made while a large part of Chang Tso-lin's was Japanese or German. A large part of the German ammunition was apparently very old. One type of pasteboard carton which had held cartridge clips picked up after Chang's retreat had the date 1890 on it. Quantities of other types of German made artillery and small-arms ammunition were in evidence. In some instances Chang Tso-lin's officers and men complained about the quality of their ammunition.

RAILROAD TRANSPORTATION.

As to rail transportation, had it not been for the work of the British members of the staff of the Peking-Mukden Railway Chang Tso-lin would have been unable to get his troops and supplies from Manchuria to Chihli Province to fight. Certainly if it had not been for these same Britishers who stuck to their posts regardless of the war, Chang would have been unable to move out any considerable number of troops at the time of his withdrawal. This would very likely have resulted in the destruction of a large amount of rolling stock and roadbed. As it was the railroad functioned so well that with Chang Tso-lin's withdrawal there was withdrawn also 90 per cent of the rolling stock and engines of the entire Peking-Mukden line.

Two years ago, south of Peking, during the Anfu trouble, Wu Pei-fu had great difficulty with his one-track railroad transportation line. Train loads of troops and supplies were delayed for hours because of proper system of despatching was not adhered to. Military officers would take no orders from railroad officials. This year Wu Pei-fu placed all train movements on the Peking-Hankow Railway under a French man, Perretti, an old employee of the line. Movements were made without apparent difficulty on the Peking-Hankow, but after Chang's retreat and Wu's advance along the Peking-Mukden his transportation difficulties became evident. Engineers and train crews from the Peking-Hankow line trained to operate under the French system caused difficulties for themselves and for everybody else when they tried to operate on the Peking-Mukden line, an English system. The Chihli officers were distrustful of the Peking-Mukden officials, both Chinese and foreign.

FIELD TRANSPORTATION.

In the field in north China, while pack mules, camels, donkeys, ponies, coolies, wheelbarrows, etc., can all be used, the most common

and most dependable means of transportation is the two-wheeled Chinese cart usually with one pony or mule in the shafts and one or two more ahead of him. The Chinese military leader commandeers carts and coolies generally during operations. At the close of a campaign they are permitted to return home.

COMMUNICATIONS.

Chang Tso-lin had a field wireless station erected at his headquarters at Chun Liang-cheng and another at Changhsintien. Fengtien officers at the latter place stated that the station there would not work. An observer on Wu Pei-fu's side has reported that Wu had one station a few miles south of Changhasintien which was used solely to worry Chang Tso-lin's stations. No reports have come in of the use of wireless telephone sets by either side although both have such sets and are supposed to have trained personnel to use them. Chang had at least one field telephone line in operation.

AIRPLANES.

Airplanes of both sides were in the air frequently. Chang Tso-lin had at the start about a dozen planes, but only one or two pilots. One of his pilots was killed in a smash. Wu had only two or three planes, but plenty of pilots. Wu's planes bombed the Fengtien lines, dumps, etc., daily but without effect. Apparently neither side attempted aerial observation and neither side wished to engage in aerial combat. The bombs used were said to weigh about 150 pounds. Airplane observation was apparently nil.

CARE OF WOUNDED AND SANITATION.

The care of the wounded and sanitation in Chinese campaigns are largely conspicuous by their absence. The Chinese nature is such that these things mean little to them. A Chinese soldier who is wounded just feels that he is out of luck, expects no sympathy from others, and is usually not surprised by getting any. There are so many defects in Chinese organizations that one must expect these to be among them. Never in their houses having known what sanitation is they can not be expected to think of it in the field.

The wounded man is usually picked up sooner or later, carried on a stretcher or an improvised stretcher usually made of a house door by empressed coolies, to a rough dressing station where a much-overworked Chinese military surgeon with military assistants make a rough dressing and administer a hypodermic. As the opportunity presents itself, the wounded are then forwarded by train to a hospital. The wounded are usually placed on the floors of freight

cars where they may remain for many hours and perhaps several days before reaching the hospital.

TRENCHES.

Shelter trenches and standing trenches were dug by both sides at various places during the campaign. These gave protection from frontal fire, but for the most part no attempt was made to avoid a flank fire enfilading the entire trench system.

USE OF ARTILLERY.

Use of artillery was very poor except in a few isolated cases. Reports indicate that the Fengtien artillery technique was better than that of the Chihli artillerists. No B. C. telescopes, range finders, etc., or other instruments except field glasses were used. As a rule, direct fire was used at targets from positions in the open. Guns were practically independent of each other. Ranges were estimated, fuses set, and adjustments made by guesswork. Poor use was made of *cavalry* by both sides. Chang Tso-lin, with a great superiority of mounted men, overlooked a wonderful opportunity to circle around either of Wu's flanks of the Hun River position and damage his communications.

MORALE.

The Infantry formations in the field are crude. When their morale is good the Chinese are indifferent to danger, and are willing to needlessly expose themselves to danger to show their bravery. To seek shelter from fire even while resting or when held in reserve would be to "lose face" among the brave.

After the withdrawal of Chang's forces north of Tientsin, Wu Pei-fu left the command of his troops to his subordinates. Gen. Wang Ch'eng-pin, commander of the Twenty-third Division, was in command of troops in the field. Outside of his failure to get the best results out of the railroad he did very well; his dispositions and troop movements worked out excellently. By a flank movement he was able without fighting to force Chang from a strong position behind the Luan River.

At Shanhai-kuan Gen. P'eng Shou-hsin, commander of the Fourteenth Mixed Brigade, was in command at the front. Again the flank of Chang Tso-lin was tried and found vulnerable.

The fighting of 1922 has demonstrated again that the Chinese methods of fighting are still crude. Judging by American standards, all the organizations are very poorly trained and equipped. Chinese officers, with very few exceptions, practice little of the technique of even 1914 warfare. The training and instruction supposed to have

been given by the many Japanese officers who have been instructors in various Chinese military schools for several years up to 1920 and advisers to various Chinese officers has either been deficient or the lessons have not been absorbed. Certain it is that the officer whose success is preeminent received his instruction in Chinese military schools prior to Japan's having attained her dominating position therein. No Chinese officer of the many who have received training abroad has stood out either as a leader or as a strategist. The Anfu commanders, equipped, trained, and advised by Japanese officers, in 1920 failed to carry out perhaps the first rule of warfare—flank protection. In 1922 Chang Tso-lin's troops, also largely equipped, trained, and advised by Japanese officers, failed to successfully protect their flanks, not only once but three successive times. Incidentally many of the officers fighting for Chang Tso-lin this year fought against Wu Pei-fu in 1920.

The chief deficiency of the Chinese armies is the ignorance, inefficiency, lack of the qualities of leadership, lack of "guts" and of patriotism of the officers. If properly officered the Chinese soldier will go far. After three years' service commanding or on duty with negro soldiers and after an equal period of close observation of Chinese soldiers, the writer is more and more struck with the similarity between the negro soldier and his yellow brother at arms.

AIR SERVICE IN FRANCE.

13 July, 1922.

[The following report is a translation of an article appearing in a German aeronautical periodical.]

THE AIR SERVICE IN FRANCE.

Among the nations carrying on air service, France takes an important place. From the Montgolfiers to Bleriot we repeatedly find Frenchmen in the foremost place of the daring conquerors of the air. The prominent part played by the French fliers in the World War, even we as former enemies must acknowledge. France goes even so far as to ascribe to her flier troops the decision in the deadly struggle of the nations. The flier heroes of the French Army, whom one indicates as "Aces," have been nearly raised to the place of national heroes. In its military air service, France sees her deliverer from the dangers overcome and her defender against the dangers of the future.

Hence it is noticeable that the French air service of to-day, even the commercial air service, is of strong military importance. In addition to a strong active war air fleet, a productive commercial air fleet will be maintained, which will serve industrial purposes in peace times, and in war will be the reinforcement of the country's

defense. Perhaps one attaches too much weight in France to this latter point; as there, the construction of commercial airplanes is too much in accordance with military rules and neglects the development of really productive and economical commercial types. If one may give credence to the adverse comments of the English press, regarding the last air service exhibition which took place in Paris in November, France has designed practically nothing in the last few years in the sphere of commercial airplane construction. The French air service owes its development up to its present prosperous state chiefly to the abundant Government subsidies which allow the operating organizations even to fly with uneconomical types of airplanes.

In 1918 the first French air post line was established between Paris (Le Bourget) and St. Nazaire via Nantes. The establishment of the grand international line to London failed originally on account of the opposition of the English, but was finally put in operation in August, 1919. To-day air service lines radiate from Paris in nearly every direction. These are: Paris-London; Paris-Brussels-Amsterdam; Paris-Strassbourg-Prague-Warsaw; Paris-Lausanne; Paris-Le Havre; in southern France we have the lines: Borbeaux-Toulouse-Montpellier; Nimes-Nice: and Toulouse-Casablanca as also Bayonne-Bilbac-Santander. It is surprising that Paris has no air connection with the southern air lines. This want will be remedied by night express trains between Paris and Bordeaux-Bayonne; Paris-Toulouse; and Paris-Avignon, as the ground organization is not yet so far advanced as to be able to establish a night flight service with sufficient regularity which would have connection with the day flight schedule of the southern French lines.

GLIDING TRIALS AT CLERMONT-FERRAND.

11 September, 1922.

The so-called soaring flights at Clermont-Ferrand in France were, in reality, nothing but gliding flights, in some cases altitude being gained by the initial impulse or by an obvious upcurrent of air, and at no time was there any indication that any new principles of flight were involved whereby the supposed ability of soaring birds was duplicated.

The success of one of the major prizes—that is, totalization of time in the air—depended almost entirely on the energy of the individual parties in getting their machines back to the top of the hill and taking off again. The length of time in the air depended on the height of the starting point and, to a certain degree, on the amount of wind blowing at the time and the availability of a landing field

below. In some cases pilots, notably Bossoutrot, were a little more proficient in taking advantage of certain irregularities in the terraine, and thereby getting a slight upcurrent during their flight which aided in prolonging their duration in the air. Another material factor in duration was light wing loading, and practically none of the planes ran over 2 pounds, although the *Bellanger*, in which Fetu killed himself, was notably heavier than the others, and when he lost flying speed, instead of falling off on a wing and catching again as a kite would do, he went into a conventional spin without sufficient altitude to pull out, although with enough to crash very hard. None of the other planes showed a tendency to spin, although it would probably have been possible for a pilot to spin one.

The experiences gained at this meeting, however, have given a new impetus to the question of motorless flight in France, and it will undoubtedly be carried on with enthusiasm, although none of the pilots was able to imitate the soaring flight of birds, in which the bird seems able to remain in flight for hours without flapping the wings or without muscular effort. A bird is supposed to be able both to glide and to soar, and in the glide lets itself descend under the action of gravity and employs the action of the air under its wings to diminish the angle of descent; this kind of flight is possible with the ordinary airplane with the motor stopped or throttled down. It is, of course, generally known in effect that an airplane with the motor cut out, but which has air speed, descends more or less slowly, following a path, the inclination of which varies according to the aerodynamic qualities of the machine. In that which concerns easily gliding birds, like seagulls, the path that they follow is often so near the horizontal that they lose very little altitude. The best airplanes glide from six to ten times their height, while the present gliders of well-designed type, launched from the top of a hill into the valley below, may be supposed to glide from twelve to twenty times their height. These machines are evidently only capable of gaining altitude through obvious vertical components of an external force, i. e., an ascending current of wind caused in some manner by the terraine. The ability to sense these ascending currents and to utilize them evidently lies in the training and experience of the pilot, and records such as were created recently in Germany depend on a combination of the terraine and this ability of the pilot to stay in an area of ascending currents. Once in this area, and with a machine maneuverable enough to stay in the area, it seems possible for a pilot to maintain himself in the air as long as the wind holds up. In the absence of an ascending wind, these machines can only descend in gliding flight, with a speed more or less great, depending on their aerodynamical efficiency,

their length of glide depending on the elevation of the point of departure.

Many able thinkers in aerodynamical matters seem convinced that the question of a machine for soaring flight is not to be discovered; that it has existed for a long time in the motored plane, with the motor cut out or throttled down, but it seems that the soaring flight of birds proves contrary to this, and that certain birds are able, in some manner, to extract energy from the air and to gain altitude without having a vertical component.

The performances of certain pilots, like Bossoutrot, Douchy, Sardier, Allen the American, Barbot, Chardon, and Coupet, have given proof of a certain and increasing mastership of a developed sense of feel of the air. This sense is not considered difficult, and might be obtained in an ordinary airplane, except for the fact that the normal flight speeds of heavily loaded motored airplanes creates such a strong apparent wind that the sense of feel of the real wind is entirely overcome. It was obvious from this meeting that certain pilots were succeeding as they gained experience in picking out advantageous areas and in gaining a little height, in consequence of rising air currents, such as exist only in mountainous districts. It was equally evident that none of the pilots executed pure soaring flight, which is considered to consist in performing evolutions in a horizontal plane, not only without losing altitude but in gaining some, resulting in bringing the airplane to find itself over the starting point several moments after its departure.

The impossibility of realizing such flights at the French meeting seemed due, in part, to the fact that the machines which were present are, for the most part, simply ordinary airplanes without motors, and of very light construction. One of the Farmans was an exact duplicate of his sport plane, except for lighter construction; except for the added experience of the pilots and a more advantageous terraine, none of the machines will be able much to improve their performances.

Doctor Magnan, the director of the School of Higher Studies of Paris, thinks that, whereas the ordinary airplane finds the wind an obstacle, the soaring machine will find the wind its most material aid and, in order to utilize this aid, must have flexible wings.

Some of the machines present at the meeting, notably the one designed by Dewoitine, was of monoplane form but in which the monoplane wing had two sections, one placed over the other, and was fitted with elastic bands placed in the chord in the fabric, which allowed a certain amount of play both fore and aft and vertically. For some reason this machine was not out of the hangar, and a picture is not at present available.

The French authorities went to considerable expense and pains to organize the meeting carefully and to arrange for all details of living conditions. The camp was well laid out, and provisions for living well arranged. Arrangements for this sort of meeting are expensive and difficult, for they must necessarily be made at remote points.

A great many of the machines were obviously freaks and spent their whole time in the hangars.

BILL GOVERNING FRENCH COMMISSIONED PERSONNEL.

21 August, 1922.

The Minister de la Marine, in preparing the bill to reorganize naval establishments and the naval service in general, has drawn up a project in connection with the commissioned personnel. This is always a difficult matter for those who are responsible for the future of the service. The strength of officer personnel is not a subject to be drawn up without due deliberation and there is always the danger of reducing it because drastic changes or reforms can be made only covering a long period of time. After the disarmament agreement reached at Washington, the American Congress asked that the United States Navy reduce the number of commissioned officers. Secretary of the Navy Denby made a declaration which is interesting to note: "Since we desire to make economy essential in the Navy, we should first seek it in the shore establishments, then in the credits necessary for the upkeep of the fleet, and next in the credits necessary for the construction of ships, and last of all at the expense of the personnel; and distinction must be made between the naval auxiliary officers and regular naval officers, and no reduction should be made in the latter unless absolutely necessary. Line officers of the Navy form a special corps and they can not be drawn from any other walk of life." Without doubt these considerations have a special weight in so far as the United States is concerned because of the absence of reserves and due to the recent large development of the United States Navy; still, they have their value in regard to other nations. The British are paying particular attention and their efforts are directed to reducing the officer personnel to the number of 1914, to which figure it is still greatly in excess.

In connection with us our financial situation obliges us to use every means of economy compatible with our security, and we know that the French Navy Department has not failed in this respect because the budget for the navy is the one least augmented: From 642,000,000 in 1914 it has passed 928,000,000 in 1922 (all expenses for new construction comprised therein), an increase of 43 per cent.

while all other budgets of the Government have been increased over 200 per cent.

The Chamber of Deputies is always ready to believe that any expenses for the navy are in a large measure a waste of funds. The poor utilization of credits for the navy has become a source of common abuse of various orators, and every project for the navy is examined with a critical eye. The proposed bill of officer personnel will not escape this rule, and no matter how thorough the bill may be drawn with a view to reducing the personnel to the minimum there will certainly be many who will not find the reduction sufficient. The point in question is the constitution of our fleet in the years to come. The constitution of the fleet is not and can not be fixed in a precise manner. We are in fact in a period where the principals for which the fleet has existed for 30 years are being made the subject of grave discussion. The development of enormous sized battleships which discourage the best adherents, the development of the torpedo as a weapon, the rapid progress and future of aviation does not permit us at present to decide that our fleet will, in 15 or even 10 years, be composed of so many battleships, cruisers, torpedo boat destroyers, submarines, or airplane formations. We must guard against any exaggerations about the success of new arms, as well as against excessive conservatism which will tend to any neglect on our part. The general board of the navy can hardly do otherwise but take as a basis for our fleet the accords arrived at in Washingtons, i. e., a tonnage maximum for battleships, light craft, and torpedo boat destroyers, number of submarines, airplanes, etc. Such was the procedure followed last year in the project for reducing the organizations of navy yards, and this notwithstanding electorial considerations and the necessity for coast defense with which the navy is charged. It is evident that should something unforeseen necessitate a strengthening of our fleet it will be necessary to revise the naval budget.

Without discussing each point separately, it is very evident that the minimum number in each grade in each corps has not been attained. The question of advancement must be taken into consideration for the future. It is, for example, very certain that the functioning of the Navy could very well be assured with 12 vice admirals, though the new bill provides for 13. It is also certain that 5 or 6 officers with flag rank would be sufficient in the Construction and Ordnance Corps (the latter corps until 1922 did not have as many). It is also necessary that the young officers who enter the corps have the perspective to arrive at a reasonable age to the rank of superior officer, with a sufficient salary to enable them to take their place with officers of similar high rank. It is also necessary that the ambi-

tious—which we hope will be numerous for the interests of the service—have sufficient opportunity to arrive at the highest grades. For the recruiting of officers and to hold them in the service it is absolutely indispensable that the proportion of high grades be not less than the absolute minimum. The minimum varies following the different corps. It can not be other than larger in the Engineering Corps because of the facility with which members of this corps find an outlet in civil industries. For this corps it is necessary to admit about 50 per cent more than needed, even then it will not be possible to keep the corps up to standard. The solution the most sure in connection with this corps consists in not assimilating the grade with the officers but to augment their salary (and try to reduce the number which would certainly be possible if we were sure to keep their services) and place them on a level with civil and mining engineers. This is the procedure followed in England. In our neighboring countries industry develops the engineers and the Government takes the best available, after they have proven their worth, and pay them accordingly. In France it is the contrary, the Government develops the engineers and industry absorbs them in time, thus depriving the State of experienced engineers which cost the taxpayers a good deal of money.

For the line officers of the Navy it is deemed that a proportion of 33 per cent is sufficient, and counting the number of deaths, resignations, etc., this percentage will permit an officer to reach the rank of commander about the age of 40 years. For the Medical and Supply Corps it is deemed that 40 per cent is sufficient, and for the Engineering Corps it is deemed that 25 per cent is sufficient, which percentage represents a notable progress compared with 15 per cent as heretofore.

All these figures are arbitrary, but they represent the result of experience. As they stand at present we have no reason for not accepting them, as the chances of promotion are not diminished in any corps, and to the contrary we find an improvement in the Engineering Corps which, up to the present date, has been little favored.

Regarding the total strength of commissioned personnel, the number of line officers will be reduced from 2,000 to 1,650, which is the total fixed by the new bill, composed as follows:

Vice admirals	13
Rear admirals	27
Captains	90
Commanders	190
Lieutenant commanders	260
Lieutenants	650
Ensigns	420
Total	1,650

It will be seen that all the high ranking grades have their strength materially reduced, not only when compared with the allowed strength for 1916, but also with the allowed strength for 1896, which was as follows:

Vice admirals	15
Rear admirals	30
Captains	125
Commanders	215

It is true that the rank of lieutenant commander did not come into existence until 1916.

The base of the proposed new strength is: The 650 lieutenants and the 420 ensigns which represent the commissioned line officers of ships and shore stations as they actually exist. In connection with this subject one must observe that the development of the flotilla, even accompanied by a reduction corresponding to the tonnage of battleships, will necessitate additional commissioned line officers. Example: Supposing that a tonnage of 24,000 tons was represented by a battleship, or by 10 torpedo boat destroyers of 2,400 tons, or by 20 submarines of 1,200. Twenty-one line officers will be sufficient for the battleship, whereas 5 will be necessary for each torpedo destroyer or 4 for each submarine, making a total of 21, or 80 line officers, as the case may be. The authorities who count on economy by constructing submarines instead of battleships have forgotten the above consequences which appear very logical. In connection with aviation it is also the commissioned line officers that will be most needed.

It must then be stated that the figures as suggested by the general board of the Navy are the very minimum. The number of commissioned line officers adopted is 1,070, when in 1896 we had 1,174 (754 lieutenants and 420 ensigns) and that the preceding decree—that of December 12, 1874—allowed 1,120 (700 lieutenants and 420 ensigns).

It must be remarked also that the allowed strength as given above comprises officers with fixed residence (no longer available for sea service). They were not able to eliminate this status and no doubt it was a good chance to do so. This type of officer (fixed residence) has never supplied any real need, but has permitted officers which were no longer any use at sea to settle down in one place with ease and comfort, which many civil officials might envy, and bringing with it promotion up to the honorable grade of captain. Again, it was thought necessary, under the pretext that promotion was not as rapid in this class, to give them extra allowances over their comrades of similar rank. We would have found it much more rational to renounce this conception and give such shore duty to officers temporarily indisposed for sea service. However, the general board preferred to reduce the number of officers of residence fixed to 15

commanders, 15 lieutenant commanders, and 10 lieutenants, a total of 40 officers instead of 207, and abolished altogether the grade of captain, the inutility of which has long been established. The reduction in the number of officers will not produce any slowing up of promotion, since for the past three years the Secretary of the Navy has decided only to fill a part of the vacancies occurring in the grades of officers. The allowed number of lieutenant commanders, which was fixed at 320 (plus 45 on residence fixed) by the law of 1916, has never passed 240 in all. At present the number of high ranking officers is not any more than the new bill provides for. There still exists in the above an inconvenience from the point of view of the Chamber of Deputies. While the above appears to bring the officer personnel in line with economy, there is really no saving in the actual budget for the Navy, and it is feared that the Government will inform the Secretary of the Navy that the present efforts will not cease but that another effort will be made to reduce the total strength of existing commissioned personnel.

This inconvenience does not exist for the other corps which carefully held their high ranking officer strength to the maximum allowed by law. It is curious to note such a difference of treatment in the various corps which receive all orders and instructions from the same Secretary of the Navy. Speaking only for the high ranking officers, the project of the new bill reduces the number from 13 to 10 in the Engineering Corps, 8 to 6 in the Construction Corps, 7 to 5 in the Ordnance Corps, and 8 to 7 for the Supply and Medical Corps. The proportion rests nevertheless the same in relation to the line officers—2.5 per cent against 2.2 per cent—but there will result a slowing up in promotion and the sacrificing of certain essential interests. However, the number of high ranking officers will still remain more numerous than in foreign navies and more numerous than is actually necessary for the running needs of our Navy.

The project of the bill which we are analyzing modifies the age limit, which is evidently very logical. It fixes the age of 62 years for grades corresponding to vice admiral, and 60 for those corresponding to that of rear admiral, and 59 and 58 to those corresponding to captain and commander. We already know that vice admirals and rear admirals are placed in retirement at the age of 62 and 60 in accordance with the law of 1916, but captains and commanders are, respectively, limited to 56 and 54 years. It was not deemed expedient to change the last two figures, as it might interfere with the promotion of line officers. We will arrive at that no doubt within a few years and it will be only just, as the ages of 56 and 54 are not the ages an officer should retire from active service.

The above is the gist of the bill that the Chamber of Deputies will soon debate over. We must admit of the necessity of these reductions, and we think that the general board can not go below the figures quoted.

FRENCH RANGE AND DEFLECTION KEEPER.

23 August, 1922.

The latter part of November, 1920, certain Le Prieur fire-control apparatus was shipped to Washington. The two principal instruments were the "Conjugateur Graphique" and the "Conjugateur Mécanique," both range keepers.

The present invention is the "Combinateur de Tir Le Prieur," a mechanical range and deflection keeper, the same being an important improvement over the "Conjugateur Mécanique" above mentioned, in certain respects which will be hereinafter mentioned.

It is understood that the present instrument has been adopted as a regulation instrument in the French Navy. In October, 1921, one of these instruments was placed on board the armored cruiser *Pothuau* for trial. This vessel constitutes the target practice school of application. In rendering this apparatus regulation the French Navy gave the "Precision Moderne" a contract for a first series of 15 of these range and deflection keepers. This series is in course of fabrication and the mounting of the first apparatus to be completed will begin this next November.

The former range keeper only kept up to date the variations of the range due to the variation of the distance between the two adversaries. In other words, it only caused the modified range to vary as a function of the "time-range finding" ("chronotélémétrie"). A differential gearing only permitted applying at will, a supplementary correction having to be calculated separately by the fire-control officer, without any automatic apparatus. The present range and deflection keeper (combinateur), on the contrary, performs automatically the calculation of this correction, and mechanically adds it to the time-range finding, so that all the corrections which make up the modified range and deflection are obtained mechanically and applied automatically.

Finally, in connection with the former instrument (Conjugateur Mécanique), there was no mention made of the deflection; in the present range and deflection keeper (combinateur), on the contrary, this element of fire is automatically maintained correct under the same conditions, and as a function of the firing elements, viz:

(*a*) Course and speed of firing vessel.

(*b*) Course of speed of the target.

(*c*) Direction and force of the wind.

(*d*) Displacement of target during the time of flight of the projectile in the air.

(*e*) Density of the air.

(*f*) Correction of the drift of the projectile due to the rifling.

(*g*) Spotting corrections ordered by the spotter or the chief fire-control officer.

In brief, the present range and deflection keeper (combinateur) presents the advantage of furnishing the modified range and deflection calculated automatically and instantly, which therefore avoids errors and loss of time inherent to the use of former apparatus.

FRENCH NAVAL TONNAGE LOSS IN WAR.

21 August, 1922.

Total amount of tonnage lost during the war (includes all ships mobilized under the navy) amounted to 172,540 tons, composed as follows:

1. Lost at the hands of the enemy, 102,680 tons.
2. Lost due to accidents, 6,860 tons.
3. Merchant ships lost at sea incident to war, 9,000 tons.

Ships mentioned in subparagraph (1) comprise 4 battleships, 5 cruisers, and 9 torpedo boats.

Those lost by events at sea (collision, grounding, explosions, etc.) comprise 15 torpedo boats, 14 submarines, 2 gunboats, and 1 sloop.

Merchant ships mobilized in the navy and lost comprise 6 auxiliary cruisers, 20 trawlers (used as patrols), 25 patrol boats. Those lost by events at sea (collision, grounding, etc.) comprise 37 patrol boats.

It must be also mentioned that two patrol boats and one torpedo boat have been sunk since the armistice as the result of floating mines.

THE WRECK OF THE "FRANCE."

31 August, 1922.

Concerning the wreck of the battleship *France*, the following is the latest telegram communicated by the Ministry of Marine:

On August 27, 1922, the divers discovered a slab of rock 8 to 10 meters broad and 15 to 20 meters long, the greater side of which is oriented E. N. E., W. S. W. The height of the highest point of this slab is 9 meters below zero. The head of this rock has been freshly broken. Adjoining the side of the slab is a block which likewise presents a recent fracture the thickness of which is about 1.50 meters. By the side of this block various articles were picked up, especially pieces of plating which exactly correspond to the bottom plating of battleships of the *France* type. It would therefore appear that the *France* touched a rock emerging at 7.50 to 8 meters and located exactly in the direction given for crossing the passage of la Teignouse.

This telegram is signed by the commander in chief of the Mediterranean Squadron, and its tenor leaves room for no doubt.

Therefore, the *France* was actually torn on a ridge of granite not mentioned on the charts. In order to be able to judge whether the commandant committed a professional fault by passing along the line of the Teignouse, let us examine the chart and the sailing directions. The line from the Teignouse Light to that of Port Navalo, on which the catastrophe occurred, is protected by the white sector of the Teignouse Light. Ships following this passage shall keep a little to the right of the line, on account of the direction of the current, but they shall in no case drop into the red sector. Admiral Salaün's telegram shows that the spot, on which the bearing of the slab of rock was found to be omitted on the charts, was in the white sector. The sailing directions, on their part, mention the Teignouse Passage amongst those accessible to large ships, i. e., to the large battleships of the *France* type. Referring to the chart, on the site where the unlucky battleship struck, it describes a slab the bottoms of which vary from 17 to 19 meters, the soundings being expressed in meters below the level of the lowest seas. The commandant was therefore authorized to follow this route, and he did not commit a professional fault. Can he, at least, be reproached with imprudence?

It is certain that it was perhaps the first time that a ship with a draft of that of the *France* passed la Teignouse at a moment of the lowest sea, at an epoch of the year when the tides are particularly low. Considering that under certain circumstances rocky points not borne on charts have been discovered, it would have been more prudent not to have taken the Teignouse Passage at the moment of low tide. It was seeking a difficulty when it would have been so simple to have entered through the large pass. The commandant was assisted by a pilot master of the fleet. This pilot gave the commandant the advice to follow the fatal route. He stated that under similar circumstances he had piloted large ships on the same alignment. While regretting that the pilot did not show more circumspection, from a nautical viewpoint he can really not be reproached with regard to the route followed.

The chart of the Bay of Quiberon was drawn up in 1906; it is therefore quite recent; it bears the signatures of the hydrographic engineers Rollet de L'Isle, D. Cot, H. Roussilhe, F. Volman, and L. Pélissier. Finally, it is specified: "The passage of la Teignouse is taken from the bearings taken in 1897 under the direction of M. J. Renaud, hydrographic engineer." In the taking of these bearings, how could a rocky slab of the importance of the one discovered by the divers have been omitted? That is difficult to ex-

plain. It is said that the sounding lead does not catch on asperities of reefs, but when it is a matter of the hydrography of an alignment as frequented as that of la Teignouse, a lacuna in the hydrography is scarcely admissible. It is all the less so when at nearly a mile to the left the "Hoche" rock, which this battleship touched at 6 meters on a bottom marked at 14 to 17 meters on the chart, should have shown the importance of leaving no point of rock unsounded. In case of doubt, the Teignouse Passage should have been not advisable for large ships, at least at low tide.

NOTE.—It would appear that there will result a discussion, if not a conflict, as between the seagoing personnel, represented by the commander-in-chief, and the personnel of the French hydrographic office. The commander in chief has been outspoken in his support of the commanding officer of the *France*, Captain Guy.

FRANCO-AMERICAN RELATIONS.

22 August, 1922.

The following is a translation of an article by Andre Tardieu, deputy:

The reason why the United States, in financial and economic matters, is so distant from France is because we have done nothing to draw the United States near to us.

1. The return in the near future to Paris of M. Jean Parmentier, director of bonds, etc., in the bureau of the minister of finance, is not of much significance.

2. Mr. Parmentier went to Washington, not to treat with the subject of debts nor to discuss it. His mission simply consisted of presenting to the American Treasury an exact table giving the financial situation in France. This having been accomplished, the director will return to France and give an account of his mission. I cited the other day the opinion of Mr. Abbot, chief editor of the Christian Science Monitor, in his statement: "The politicians in the United States are fully aware that France can not pay in gold, and if she pays in merchandise the American markets, already overstocked, will suffer greatly." They are aware of this fact, but no one dares to say so.

3. The great drawback in this whole affair is that there does not exist any solidarity of affairs between America and France, and consequently no one in New York or Chicago is interested in making any arrangements to facilitate payments.

4. I had hoped in 1918 to create this solidarity to endure for many years, but for reasons of internal politics I was unable to succeed.

5. It was in the middle of October, 1918, that victory was reasonably certain and the problem of reconstruction was already thought of. To me the financial aid of the United States was absolutely necessary to carry out any construction in a large scale. The American law authorized the Treasury Department to loan money to the Allied Governments only for the war and during the war. If then we had wished to have credits for construction, it was necessary to have another law passed.

6. To take the necessary steps to have this new law passed was what I was about to ask Mr. McAdoo, Secretary of the Treasury. After negotiating with Mr. McAdoo for 5 days we arrived at an agreement, and he informed

me that he would present the matter to Congress. I returned to France having obtained his promise in connection with this matter. Upon my return, the Communists press attributed my voyage to the most extravagant motives.

7. The law as contemplated would have permitted us to dispose of several billions in credits. Of course it must be understood that under the same conditions that dollars were loaned for the war, that the dollars loaned for construction would have to be spent in the purchase of material in the United States or in the employment of American workmen. In any event we would have had the benefit of the powerful American industrial organization to help us rebuild our ruins and we would not have had to make any immediate payment.

8. When I returned to France, I immediately met with all sorts of resistance. I begged M. Loucheur and Clementel, minister of the reconstruction of industries, to draw up a program—that is to say, a list of material to be purchased in the United States and the number of American workmen needed to complete the work. I was not able, notwithstanding my insistence, to receive any reply.

9. My two colleagues spoke of the necessity of assuring work to the French factories and by every means to avoid unemployment. From November, 1918, until May, 1919, this situation did not change. Several American and English industries came to Paris, due entirely to the proposed law which McAdoo had under consideration, with the view of aiding us to rebuild the devastated country, and naturally to make a certain profit on the deal. It resulted that during the month of May, the American Treasury, seeing that the demand for credits was no longer desired, did not present the proposed law for passage. The party of protective reconstructions triumphed. We missed the chance to have foreign capital become interested in the rebuilding of France. I believe that this was an error; as sufficient proof we have only to recall that M. Loucheur, the champion of protection in 1919, was in 1921 the negotiator of the accords with Wiesbaden, against which we have heard the objections of the French firms.

10. And above all, this helped to weaken the business ties between the United States and France. I say it without irony, but as the result of experience. If we desire to arrange sentiment we must also find a means of satisfying business interests. All of this time the American production would have been associated with our efforts and the American people would have many times brought pressure to bear with their Government in our favor.

11. Nothing is more useless than the regrets of what might have been. The above is simply to clarify the present difficulties. The greatest danger in the present financial situation is the strong partition which separates the French interests from the interests of the Anglo-Saxons.

12. I will be greatly mistaken if M. Parmentier, upon his return from the United States, does not confirm this sentiment.

FRENCH AVIATORS TO GO TO BRAZIL.

26 July, 1922.

About a week ago there appeared in the local press a statement that the Brazilian Ministry of Marine intended to contract an aviation mission with the United States Navy.

In to-day's papers there appears a long dispatch from Paris announcing that the French Government has decided to send to Brazil

the most famous French ace, Fonck, with a few of his companion aviators, in order to give a demonstration to Brazilians of the advanced state of the art in France, and also to show the great friendliness existing between the two nations.

There is no question that this action is taken by the French in order to recover lost ground here and, if possible, to extend their activities in Brazil. There has been very great dissatisfaction on the part of the Brazilians concerning French Army aviation material which has been sold to the Brazilian Army by the French Government.

In this connection, the fact is recalled that the American agent of the Curtiss Co. recently concluded a very satisfactory contract with the Brazilian Navy for machines.

FRENCH PROPAGANDA SERVICE.

24 August, 1922.

[The following article establishing a bureau of propaganda in the French Navy is taken from the Bulletin Official de la Marine, and is considered very important.]

As an amendment to circular of March 6, 1922, the different units and different branches of the service will find in the following instructions the necessary directions for conducting the propaganda service, and modifying the decree of November 13, 1919.

A. ORGANIZATION.

1. The propaganda service, whose central offices are at the Navy Department (Ministre de la Marine) is confided to the care of "Section on maritime information," which bears the title of "Section of the press and of maritime propaganda."

2. At the head of this service, and under the direction of the chief of the military cabinet of the minister, is placed a high ranking naval officer of the line.

3. In each naval port, force, center, or maritime establishment, and under the direction of the chief of staff (chef d'etat major), an officer is charged with the duties of propaganda; and takes the title of "Propaganda officer."

4. Each section coming under a commandant of naval forces, ports, etc., will have an additional officer detailed by the commandant of the forces, when in his opinion same is necessary, to aid in propaganda work. The officer so detailed will come under the orders of the propaganda officer and will have the title of "Assistant propaganda officer."

5. The different propaganda officers should always act in perfect liaison.

B. FUNCTIONS.

6. The basis of the propaganda bureau is to inform public opinion on all naval questions and to enable them to judge matters pertaining to the navy more readily.

7. It comprises particularly press propaganda, which is the natural intermediary between the navy and public opinion.

8. The "Section of the press and maritime propaganda" should receive from the various ports, naval forces, naval bases, etc., all information that may be of interest to the press.

9. In addition to liaison with the central activity bureau, a certain amount of freedom will be accorded each propaganda officer, in order that he may conduct his work with the local newspapers in the neighboring towns to which he is stationed.

Each propaganda officer will get in touch with the local press, and under the responsibility and authority of the navy, which he possesses at all times in connection with this work, will furnish the press any information, verbal, written, or photographs, which may be of interest.

10. The attention of propaganda officers is particularly invited to the activity and initiative which must be shown in exploiting all sources of information at their disposal, whether it be in perusing a program of future events in connection with the navy, or any studies which might interest the public. Any details or information necessary on any subject will be given by the proper officer of the "Section of the press and of maritime propaganda."

11. Propaganda officers will bear in mind that in matters of publicity no item of information is of such a minor character as not to be of interest to some one, and it is by constantly presenting to the public, under as many different headings as possible, the many items of interest connected with the navy, that we can expect to hold their interest and attention and little by little indoctrinate them with the principles of a sound naval policy.

12. Any documents, information, etc., should be accompanied if possible by photographs.

13. Any propaganda information, depending on what subjects are covered therein, will be communicated to the central office or to the local press under the form of interesting news items which can be utilized by the press.

14. All information furnished by propaganda officers is strictly impersonal. Therefore, discernment and sound judgment is recommended. The provisions of circular of June 5, 1913, does not apply to propaganda officers, in connection with their work on propaganda, and the Navy Department will not assume any responsibility.

15. It is understood that propaganda officers will exercise great care in preparing matter destined for publication and will discriminate and differentiate between articles sent to Paris newspapers and country newspapers for publication. The interests of the various newspapers must be borne in mind at all times.

The same applies to photographs and, except in a particular case, the same information should not be given to several newspapers.

16. In order to stimulate zeal amongst the propaganda officers, and let them know the results of their efforts, the central bureau will endeavor to procure for them one or several numbers of the various publications which use their articles.

C. INFORMATION FOR THE PRESS.

17. Information is of two characters—information and photographs.

Information.

18. Information is divided into two groups: Regular items of information, as is commonly known, and items of study "les Etudes."

19. Regular items of information comprise all information which would interest the daily press or periodicals concerning the Navy or naval politics.

20. All items of information should be varied and should comprise all branches of naval activity, i. e., technical subjects, military subjects, schools, navigation, aeronautics, commissions, experiences, morale, events at sea, patriotic ceremonies, receptions in France and in foreign countries, scenes of daily life on board ship, sports, shore recreation clubs for sailors, regattas, boxing, etc.

21. The above group of subjects are principally of interest to the daily press and especially so when they are actual events that took place.

22. Items of study are similar to the items mentioned above but of a more studious and developed nature, but they should be written with the distinct purpose of becoming popular with the public and to help them to keep posted on all naval matters with which they are not sufficiently acquainted. The technical side of subjects should be rarely dealt with, except for publication in certain periodicals which are read by a certain class of people.

23. The character of actuality is of less importance for this class than for the former, but propaganda officers should not, however, forget that even in periodicals a certain actuality is required.

24. The items of study should also be concise.

These articles will be offered to periodicals (reviews, bulletins, etc.) or to weekly maritime publications.

FRENCH FOREIGN POLICY.

Source: Former President Deschanel.

11 July, 1922.

Probably no man in France was better equipped for discussing the foreign policy of France than was the late Senator Paul Deschanel. The following was prepared by Monsieur Deschanel for delivery in the Senate. He died before the date set for his speech and it is published now posthumously.

It is commended to the reader as a very concise examination of the foreign policy of France.

For 12 years Monsieur Deschanel was the president of the Chamber of Deputies, a position of great importance and influence in France. He resigned when elected President.

His experience in the Presidency is touched upon in this address. He resigned after seven months, due to physical disability.

After leaving the Presidency he served as senator up to the time of his death.

A member of the French Academy, Monsieur Deschanel was recognized as one of the most cultured type of French gentleman and statesman.

GENTLEMEN: I am asking certain information of the Government on our foreign policy.

First, I would point out, in agreement with Messieurs Ribot, Doumergue, and Poincare, the disadvantages of diplomatic practices as carried on since 1919.

In all times past, under all régimes, absolute monarchy, committee of public welfare, directoire first empire, constitutional monarchy, we sent ambassadors accredited to foreign States and the ambassadors reported to the Minister of Foreign Affairs the results of conversations. The minister would then take up with the cabinet the matter to be examined. After deliberation in the cabinet the foreign minister would issue appropriate instructions to his agents (ambassadors or ministers).

This method had the advantage of affording several lines of retreat, time for study of a question, time to prepare well considered replies, and finally to grant concessions only at the highest cost to an opponent.

While it did not exclude interviews between heads of Governments, yet such interviews were prepared in advance and not left to impromptu conversations.

6. On one occasion a chief of State, Napoleon III, thought to treat directly with foreign governments. More than once he negotiated without the knowledge of his foreign ministers, and even in opposition to them, and in 1870, in the absence of his Premier, Emile Chiver, he demanded of William I certain guaranties which resulted in the breaking out of war.

7. This method of handling international affairs was resumed again in 1919.

New Diplomatic Methods.

8. Three men, who became prominent because of their great services in the War, the President of the United States, the British Premier, and the French Premier (I omit the Italian Premier only because he confined himself almost

exclusively to questions regarding Fiume and the Adriatic); these three men excluded from their deliberations people who had fought and shed their blood with us, Belgium, Serbia, Rumania, Poland, and Tcheco-Clavicia, as if these noble peoples had the right of equality only in sacrifice; they called them "States with limited interests," as if the heroic Belgian Army that stopped the invader at Liege had defended a limited interest; and without control of any kind, without official and authentic procès-verbaux, without heeding the warnings and counsels of the chiefs who had won the victory, they took it upon themselves to dispose in regal fashion, of France, Europe, and the world.

9. Whatever judgment be passed on their work, I claim it to be in formal contradiction with the principles of the Republic, with the democracy, and with the parliamentary system, and I claim that if we do not do our utmost to preclude the return of that method of conducting our foreign relations we shall be remiss in our duty to future generations.

10. In the last discussion of the budget for the foreign office, Monsieur Briand showed little enthusiasm for these new methods of procedure, saying only that they resulted from the treaty of peace. They are not a consequence of that treaty but have followed it. It is but natural that those who have profited by these methods should cling to them; but I believe that, as regards France, every advantage is to be gained by returning as soon as possible to sure and normal diplomatic rules.

11. This is the advice also of certain English statesmen of long experience. On January 27, 1922, Lord Gray expressed himself as follows:

"Because I have criticized the supreme council I am said to advocate secret negotiations. * * * I have in no way spoken of secret methods. I have stood for the calmest methods, methods the most set. One may work in quiet without necessarily working in secret. * * * Do they think the new methods of the supreme council to be secret? And is it not time that there is more secrecy now in the present Government's method of carrying on foreign relations than formerly? * * * To-day we hear much of the supreme council, but there are no records kept of their doings. Under the old system there would be kept procès-verbaux of their conversations, and frequently these would be published by way of showing the course that had been followed. The new method followed to-day is to report the fact of a meeting between 'the French and British Premiers,' but without giving any account of their conversation. In the procedure of the present Government there is on the one hand too much limelight, and on the other too much secrecy."

12. The treaties resulting from the new method, such as that of Versailles, and those following it, control now and will continue for long years to control our whole policy. We must then, in order to know where we stand and where we are headed, determine most precisely the consequences of that policy.

13. I will speak first of questions which concern our country directly—that of the frontier and that of reparations. I will then take up the problems which, while distant geographically, engage both our interest and our future, i. e., the situation of Austria and affairs in the Orient.

The Legend of Our Militarism.

14. We are charged in Germany, and, most remarkably, in England and the United States, with ambitious aims, even imperialistic ambitions. Is there, I ask, a single Frenchman who would repeat the fault committed by Germany in 1871, that of introducing German representatives into French assemblies? No; but the leaders who won the war believed that certain measures of security were indispensable in the common interest of the Allies; and, over

and above that, they agreed with the members of the committee charged with the negotiations with such men as Messieurs Charles Benoist, Aulard, Bourgeois, General Bourgeois, Cherquet, Derus, Gallois, Larisse, Pfister, Seignobos, and our leading geographer, Vidal de la Blanche. I am unable to name all of them. Certainly, these men were not imperialists anxious for conquests; they were students, republicans, professors, who knew geography and history. Moreover they were in agreement with the people in the Rhineland who had been subjugated against their wills to Prussian domination and who, in a series of noisy demonstrations, claimed their autonomy under Germany.

15. What were the arguments of the English representatives that rejected the opinion of generals, of professors, of the Rhine people, and what arguments did the French plenipotentiary oppose? We do not know. What we do know is that on the 7th of last February (1922) at the opening of the British Parliament the Premier declared that he had had to reserve the left bank of the Rhine against the operations of French annexationists.

16. This is the whole question of our relations with England, or rather with the cabinet now governing England.

17. If there be one man who feels at liberty to speak freely, I am that man.

18. Twenty years before the celebrated visit of Edward VII to the Paris Chamber of Commerce I wrote that the entente between France and England was a fundamental necessity in European politics, that their long quarrel over colonies had become an anachronism since 1870. I have always felt that greatest admiration for Great Britain, for her literary and scientific genius, for her institutions, for her men in political life. And as for the statesman who now directs her destinies, we can not, without ingratitude, forget the great service he rendered the cause of right during the war. The unity of command, so long desired by our President and by our generals, was realized through his efforts, placing Foch in command of the whole western front.

19. There is one thing, however, which the English place above either the admiration or recognition they inspire, and that is the use of firm language such as they do not hesitate to use on every occasion.

20. No one is infallible, neither we nor they—none. But what enlightened Englishman, having in his mind any thought for the future, could pretend that when, in 1815, Lord Castlereagh put Prussia on the left bank of the Rhine, he had not laid the seeds of serious complications for not only the peace of France, but for that of England as well? Only, Lord Castlereagh had a motive: Europe in turmoil for long years of Napoleon. British diplomacy sought to contain belligerent and conquering France by a warlike nation on her frontiers; thus does the abuse of power ever provoke similar reprisals.

21. And what enlightened Englishman, having in view not only the present but also the long perspective of history, would to-day uphold Gladstone for taking Lorraine from us in 1871 and placing Europe in a state of turmoil and uncertainty for well-nigh half a century?

22. But Gladstone had a reason—the secret negotiations between Napoleon III and Bismarck concerning Belgium and Luxembourg.

23. It is not we, however, who have menaced Belgium this last time, nor we who, after having deceived Belgium, covered her with blood and ruins.

24. If the English Government, which did not expect this aggression—I was convinced of this when visiting London in 1912—had spoken a little more quickly, William II would not have dared invade Flanders. And would not this word, spoken in time, have spared England and the world incalculable disasters?

25. And it is in the light of such facts that certain English people suspect us of unnamed ambitious designs, even of perfidy to them.

26. At Washington the British Admiralty presented the hypothesis that contemplated an attack of the English coast by our submarines. Some Americans and even some English were unable to suppress a smile at such a thought. But even if failing in our loyalty, would not our interests forbid our planning to separate ourselves from our neighbors? France and England need one another; they can not do without one another. When our delegates in Washington finally grapsed this point they were able to clarify the situation, but it is unhappy that they should not have had an earlier occasion for so doing. These prolonged silences made the American people doubt our intentions—this great people whom our fleet had aided so heartily to gain their independence.

27. France militaristic? Here are the figures:

Budget for 1922.

	Expenditures (in francs).			
	Military.	Naval.	Aeronautic.	Total.
English	5,365,895,600	4,288,908,000	957,372,000	10,612,175,600
French	3,709,345,454	843,618,295	254,652,440	4,807,616,189

28. Here is the truth set against fiction.

29. England's traditional policy has been to seek and maintain a balance among continental powers, to back the weak against the strong; the losers against the winners of a war. I have just shown that she has not always succeeded, and that, without so desiring, she has more than once been responsible for menace and peril to the peace of the world.

30. However, she signed the treaty of Versailles. Should Germany violate the treaty it would be the greatest imprudence to deny the territorial guaranties provided in the treaty. For England, such a procedure would be quite a different menace than would be our submarines. In defending the common frontier, we are saving not alone our own country, but as well the liberty of the world.

31. If the two nations concluded an alliance, we hope it will provide against German aggression in Poland, for unless due precautions be taken as to this, the peace of Europe will be uncertain and precarious.

32. As to reparations, the supreme council, contrary to the treaty, has put itself in the place of the Reparations Commission in fixing the amount of the indemnity and the method of payments; whence the reduction of 40 per cent in our credit, according to some, and of 50 per cent according to others.

33. Eminent financiers, such as M. Ribot, Millies-Lacroix, and Cheron, speaking with full knowledge and authority have shown our economic situation in comparison with that of Germany, and what will be our situation if we do not require Germany to meet her signed obligations. Since the treaty did not specify either the amount or the methods of payments, the Germans are slow in finding the money for making payments, though they find it for their own profit and for the purchase of arms. But, with America demanding payments from us, how can we satisfy them, if Germany does not first pay us? To take over control of Germany's finances is the only method of obtaining what is due us. Only when an inquiry has regulated this matter of reparations can the affairs of the world be set to rights.

34. Meanwhile the British Premier advances the proposition of a conference where French delegates are to sit as equals with men from Germany and with soviets, but which the United States will not attend.

35. Be it said to his credit, Monsieur Poincare asks precise conditions and guaranties; the treaties and the League of Nations not to be attacked; reparations to be treated separately from economic reconstruction of Europe: and lastly, Russia not to be admitted to discuss the policies of foreign States and the payment of debts.

36. These are excellent principles; only we know that the soviets, in order to attack industry and commerce, to get new material and to start the factories, are ready to sign anything put before them, even to give over their ports to international administration and police, saying to themselves that they can at any time take them back.

37. But while this might be to the interest of commerce, it does not hold so much of promise to holders of Russian securities. According to figures which are necessarily approximate, Russia's foreign debt is divided about as follows:

	Billion.
To France	25
To England	19
To Belgium	3½
To Germany	3½
To Switzerland, Holland, and Scandinavia	5
To United States	2
Total	58

38. France has thus advanced 25 billion francs at par, on a foreign debt of 58 billion, for the economic equipment and national defense of Russia, or about 43 per cent of that debt. We must thus create an international organization for the control of Russia's commerce, in order to levy on her exports and imports the amounts due the holders of her securities, and in proportion to the holdings of her creditors. The question is if the Bolshevist Government will lend itself to such a proposition. There is no virtue in Lenin's confession of errors in his communistic efforts unless he were to accept this, and I doubt if he will.

CONDITIONS IN GERMANY.

1 July, 1922.

Recently I made a trip by motor through upper Silesia, and then into Germany. It is extraordinary how distinctly Poland shows the traces of its former occupants. Although the land is the same, and the people the same, the minute one crosses from former Russian Poland into former German Poland the imaginary line is as clearly marked as the pink and green on the map. In Russian Poland the culture of the fields was slovenly and wasteful, and to-day it is still so. The villages were sprawling and unkempt; they are still so to-day—and to this has been added eight years of neglect. In Germany the cultivation was always intensive—no waste land, no devastated fields—and so it still is. And somehow or other repairs have been kept up. In general, Poland is not a pretty country to motor through, for the land itself is flat and uninteresting, the agriculture is careless, and the untidy villages are quite without

charm. But at this time of the year everything is at its best—fields just turning green, forests in all the glory of new leaves, and every fruit tree loaded with blossoms. The extraordinary soundness of the German scheme for replacement of forests is seen very clearly from the minute one crosses the line into Germany, for the small, carefully cultivated forests begin immediately one crosses the line, and the part the trees play in preserving the water supply, etc., is very noticeable.

I wandered about Germany for some weeks, from east to west and south and north, always stopping at some small town for the night, usually spending the early afternoon and evening in wandering about and talking to all manner of people. Often I would see a group of German peasant women with their babies, and smilingly I would ask them if they were raising these fine babies for "canonenfutter" (cannon fodder). The invariable answer was an indignant "No." Yet on talking to them further there would just as invariably be comments to the effect that these boys would some day have to fight just as their fathers have fought—because the French would not let them live otherwise. "The French will be made to weep yet," I heard over and over again, and more to that general effect. And often at night when talking to the old innkeepers I would lead up the conversation to their idea of what was going to happen to Germany. I heard it repeated many times that the French could never ruin the Germans, because the Germans were workers and were prepared to work long and hard to regain their old position. But whenever the question of the former German policy came up they all greed that the German people had been misled by their leaders, but that the French were now doing the same thing that the Germans were doing before, and that what was wrong for the Germans was equally wrong for the French. It is also very evident that all the former hatred of England has passed, and all has been turned toward France.

But the most remarkable thing of all was that when I said to the hundreds of Germans of all classes to whom I talked that after all it had been a blessing for Germany that Germany had lost the war, since the overbearing attitude of the military of a victorious Germany would have been quite insupportable, not a single German would disagree. Apparently the memory of the swank of the military is too strong to be forgotten in a single generation.

One day I motored from about 6.30 in the morning until sunset without seeing a dozen cows, and the carts and carriages I saw along the road, although built for two horses, were almost invariably drawn by a single horse, although the center shaft was still in place. And yet I don't believe that I have in years seen such evidence of prosperity as in these country districts of Germany. Work was being

done on the roads, many houses were being built, old houses were in splendid repair, and almost every house had a new coat of paint. I do not believe I've ever seen so much new paint anywhere off a battleship. The factories, too, were working.

It happened that for part of the journey a French officer was with me, and all this evidence of prosperity was a bitter pill for him to swallow, as he thought of devastated northern France. Over and over again he muttered that there would be another war, and it was clearly written on his face that the sight of all these sturdy Germans working so hard, going so earnestly about their business, filled him with dread. On Sundays we would pass hundreds of men and often women, too, with knapsacks on their backs trudging along usually to some distant height from which they could have a view, or to a convenient beer garden, but always plodding on steadily. The sight of all this energy, this tramping along dusty roads on Sunday after a week of the hardest kind of work, really struck terror to the soul of my French friend, for although he spoke German well enough not to be taken for a Frenchman, I doubt whether on the whole road he met a single German who did not damn France and all Frenchmen. Small chance, indeed, that a Frenchman feeling as he would agree to a reduction of the French Army. So again and again comes up this old principle that to understand people one must know not only the facts of the case but what they consider to be the facts, for no power on earth could have persuaded the Frenchman that it would not be ruinous to France to reduce her army. The tragedy is not only that the French do not realize that by keeping any army beyond their means they are weakening themselves, but the fear and terror they all feel makes it impossible for them ever to understand it until that terror is removed.

In Bavaria I heard quite a surprising amount of separatist talk, and this not from demagogues and agitators, but from people of standing, who carefully explained that their idea of Bavaria separating from Prussia, so as to form a federation of the southern Provinces, had nothing whatever in common with the idea of the fly-away republics on the left bank of the Rhine that were created entirely in the office of General Mangin and the French general headquarters. Of course, the Bavarians are jealous of Berlin, and actively dislike and resent the disproportionately large influence of Prussia; moreover, the Bavarians are intensely monarchistic, and their recent sufferings at the hands of the Bolsheviks and Socialists have made them bitterly anti-Socialistic and distrustful of a socialist government. But for my part I find it impossible to take such separatist talk very seriously, since every German feels that if Germany were divided there would be no hope whatever against France.

But all the smiling fields, and all the beautiful villages, and all the sturdy Germans working so industriously, all the busy factories at Düsseldorf and Essen and throughout the Ruhr, and in fact almost every little village that has a factory of some sort—and all these many evidences of prosperity, could not take from me the dread that Germany has a hard time ahead of her, and the sort of hard time that is full of danger for the rest of Europe as well. Some time ago I made an analysis regarding the present cheap production in Germany, and all the work I've done since has confirmed that this cheap production has been on an unsound basis—that Germany was selling below the cost of actual production, and that though the crash might be postponed for some later time because of the great advantage of full employment, still it could not be kept off for long, and when it would come it would come all the harder because of the weakened financial condition of Germany. A careful analysis shows very clearly that to-day America can actually manufacture cheaper than can Germany, and the only reason Germany can sell cheaper for the moment is because of the rate of exchange, which is an entirely artificial measure artificially manipulated by the German manufacturers greedy for personal profit no matter what the cost to the country as a whole. Of course, the mass of detailed study on which such a conclusion is based is too great for me to enter into here, but the fundamental principle is that in all the fundamentals which enter into the cost of production, such as raw material, efficiency of labor, organization and mass production, availability of markets, and capital and credit, resources, America is not only in as good position as Germany, but in a relatively much better one. However, due to such artificial and uneconomic expedients as the bread subsidies, cheap housing, and so on, the manufacturers have been able to force on the laborer a wage which has very considerably lowered his former standard of living, since even the increasing scale of wages does not keep pace with the depreciating mark and the rising prices of foodstuffs. Consequently the manufacturers' profits have not come from the people who bought their goods, but directly out of the wealth of their already impoverished country. The accuracy of this estimate has been further confirmed in all my talks with bankers and manufacturers, as it has become increasingly evident that the manufacturers have been in a deliberate conspiracy to depreciate the mark. They felt that it was safe to do so, because of the present enormous sales, which although unsound economically, would enable them to reconstruct their factories and build up their production in time for the Russian market which they expected to open up at the latest within a period of three or four years after the armistice. But this calculation has gone all wrong, and the Russian market is not going to open up for years

to come, for there is nothing in Russia to pay for all the stuff the Germans would like to sell, and there is certainly no likelihood of any change in this respect in the near future.

The success of the German plan of getting Lithuania to use German currency has led the Germans to believe that the same thing would be possible in Russia. It is a fact that German currency has replaced all other currency in Lithuania, and since German money has always had great prestige in Russia it was thought that payments for the great influx of German products it was hoped to send into Russia would provide the convenient opportunity to introduce German currency.

In many ways this plan was sound, for it is true that ever since the armistice the German mark has always had an exchange value in Russia far greater than its equivalent gold value. I mean that when the exchange for the dollar in Russia was about 1,000 rubles, and exchange for the dollar in Berlin was 40 marks, one would expect that the exchange for the mark in Russia would be 25 rubles. However, such is the prestige of the German mark in Russia and the faith of its eventual stability that one was able to get between 45 and 50 rubles for a mark. I remember on one occasion I myself for $500 worth of German marks actually got more rubles than I could get for $1,000 in gold. But where this German plan for the absorption of German currency fails is simply that it is based on factors beyond the control of the Germans, in that the opening of the Russian market is simply a hope or a guess and quite beyond the capacity of the Germans to determine. So what is to be the end of all this? Already prices in Berlin are approaching world prices, since Germany can not forever sell below the cost of production. Before long prices will be on a level with world prices, and Germany will not be able to compete with countries that have credit resources, and, like America, can manufacture quite as cheaply, and, in fact, even more cheaply than Germany if a decent standard of living for the workmen is taken into consideration.

This leveling of prices will mean unemployment in Germany, and unemployment is the one thing Germany can not possibly stand. Germany does not want Bolshevism, she knows too much about it. But German reserves are exhausted; and the same problem that is perhaps only a difficulty for a country such as America with its great wealth, may be disastrous for a country with its reserves exhausted. Germany can not support the unemployment which even England finds almost a breaking strain. And when a strain of extensive unemployment is added to the disintegrating influences already at work in Germany, it appears evident that there must be a crisis more dangerous than any Germany has even seen. Even the

determination to work can not help if there is no work. And to pull through, Germany will need statesmanship wiser than the greed of manufacturers that has been the directing force since the armistice. As it is, the German people seem blighted with the curse of false leaders, for the interests now at the helm though more greedy than the old, are less farsighted; and again the German people suffer for their lack of ability in choosing leaders. The most hopeful factor in the situation is that though Germany must still import food and many other essentials, she now produces more food than ever before. But summing it all up, it very much behooves us to begin at once for the most unhappy eventualities in Germany and to do what we can to prevent the rest of the world from being too dangerously disturbed by it.

There appears little hope in Germany that the conference of financiers in Paris who are now considering ways and means of a loan to Germany will be of any great help to Germany. Such a loan would do much to save the situation, say the Germans, but that fact in itself would prevent the French from agreeing to terms in regard to reparations which would make the loan marketable in America. The Germans are tremendously anxious to have this loan, not only because it seems the only chance of their pulling through the financial crisis, but rather more so on the ground that since a creditor is so closely interested in the solvency of his debtor, a foreign loan would give Germany the support of great numbers of international creditors.

To sum up my impressions of Germany, the first was the enormous strength and vitality of the German people, as contrasted with the present instability of the German Government. Next came the universal bitterness against France, the feeling that France is the root and cause of all Germany's troubles, that France did not win the war but that it is France that is exacting the pound of flesh, whereas England and America, who won the war, would let Germany live. So often would I hear mutterings that "Frankreich muss noch weinen" ("France must yet weep"), and bitter were the shakings of the fist that accompanied this threat. I stated that one could hardly blame the French attitude even if it was unsound and stupid or whatever else one wanted to call it, since their present course resulted entirely from an intense fear, and added that this fear could in turn hardly be called unfounded, inasmuch as that in the last century Germany had invaded France three times, and therefore the dread of a fourth was surely not surprising. In reply I was asked how many times France had invaded Germany during the same period. After all, there is some point in this reply, for on that score at least the balance is fairly even. But in my mind stronger than all else was the thought that the leveling of the world prices,

which must come soon, would mean havoc in Germany. So with France unbalanced because of her terrible fear, and Germany unbalanced because of hate, and general world conditions in such state as to produce economic conditions which must still further aggravate these political difficulties, it is indeed difficult to find ground for optimism.

COOPERATION BETWEEN GERMAN ARMY AND NAVY.

25 August, 1922.

Arrangements have been made in the German Army and Navy for the exchange of officers in the two services during maneuvers. In each of the military districts of Germany one or two naval officers will be ordered as assistants to the district commander and during the naval maneuvers a number of army officers will be assigned to each vessel.

Information has been received from the German Admiralty that the purpose of this exchange of officers between the two services is in order to enable the officers to gain an insight into the methods of the other service. It was stated that one of the causes for the lack of cooperation between the army and navy during the World War was due to lack of understanding of the functions of the navy by army officers and vice versa.

SINKING OF "SZENT ISTVAN" IN WORLD WAR.

19 July, 1922.

A letter of an officer of the Austro-Hungarian Navy furnished interesting particulars regarding the sinking of the *Szent Istvan*. Judging from the letter it would appear that the water-tight bulkheads were too lightly constructed (the English cruisers *Dublin* and *Dartmouth*, torpedoed in Italian waters, were kept afloat, thanks to their well-constructed water-tight compartments); and the unfortunate position of the valves for flooding the compartments, which were controlled from the lower decks, made it impossible, in spite of every effort, to right the ship.

The 9th of June, 1918, toward 4 o'clock in the afternoon the *Szent Istvan* and the *Tegetthoff* received orders to be ready with all boilers under steam. At the moment when the commander gave orders to get up steam the destroyer *Varasdiner*, with its flag at halfmast, passed the *Szent Istvan* (a 70 mm. shell having exploded in the breach of a gun causing several victims). The commander paced the deck, nervously stamping his feet, and we joked about his superstitions. As to the object of our raid the most rigorous silence was observed, although for more than two weeks there had been

talk of the ship hoisting anchor. Rumors were many and varied. It was said that a raid in the Otranto Strait together with the cruisers of the *Novara* type would be undertaken to destroy the floating obstructions there. The cruisers and torpedo boats were to attack the guard boats in the Straits and thus attract the enemy units at Brindisi and Valona. Two dreadnoughts were to be stationed near Brindisi and two near Valona to engage enemy units coming from these ports. Another rumor had it that an attack in conjunction with the southern wing of the army would be made against the Piave outlet. But this seemed to us little likely in view of the extended mine fields and the shallowness of these waters.

In fact the officers received no word as to the object of the proposed expedition. The secret was so well kept that even at the moment of the torpedoing the writer, although officer of the guard, had no idea where the ship was bound. The navigating officers had given their word of honor not to divulge the destination of the ship. On the chart the course was traced as far as Tajer. It seemed to me strange that the ship left port without unloading all unnecessary matérial as well as the belongings of officers and crew. Several times I had to ask for orders to pump air into the torpedoes, knowing that about nine hours would be necessary to get ready the 53 cm. torpedoes (nine in all). About 8 o'clock we were ready and our orders were to leave at dusk. The commander of the mine fields was advised of our departure too late, and on this account the obstructions were not removed until 10.30, at which hour we left our anchorage. We headed for Porer and then for Vnetak. As escort ships we had three destroyers of the *Huszar* type and four torpedo boats of 250 tons. The ships were in column at 400 meters distance. About 1,000 meters ahead of us the three destroyers formed an escort in line at about 1,000 meters distance from the other, and on both flanks of each ship, at about 800 meters distance, a torpedo boat took up position. We should have passed Quarnero at 16 miles, but on account of a heated bearing of the propeller shaft we had to slow down to 13 miles.

After passing Punta di Vnetak (Isola Unie) we bore to the right and then toward Porto Tajer. During all this time I was on the bridge. Every man was at his battle station. Antisubmarine batteries were ready and had orders to fire immediately upon sighting a suspicious object.

At 2 o'clock a. m. June 10 I mounted guard. The commander was seated to the right on the lower bridge. At about 3.30 toward the west the first streaks of dawn appeared through a chilly Adriatic mist. The commander ordered me to verify the position of the escorting destroyers. I obeyed his orders and at the very moment of my telling him that all of the escort ships were in sight and in

position, two explosions were heard under the bridge to the right. At first they were thought to be alarm signals, but almost at the same moment the ship listed to starboard and a cry from the crew confirmed our fears. Panic reigned only for an instant. Guns were immediately manned and everyone was at his post; all eyes were turned toward the sea. But too late. Nothing could be seen.

I hurriedly telephoned the engine room to stop the ship, and this order was approved by the commander. By telephone I learned that water had entered forward of the after boilers but the ship was still able to proceed at slow speed. The commander asked how far we were from Porto di Brgulje (Melada Island), and we steered slowly for that port. The ship was then listing 7° to starboard. We had hardly started on our new route when the engine room telephoned that water had commenced to enter the forward boiler rooms also. This meant that all 12 boilers were being flooded. We were now without steam, without electricity or radio. The list increased—about 1° every 15 minutes. We megaphoned a torpedo boat to call the *Tegetthoff* to take us in tow. The *Tegetthoff* was then about 10,000 meters distant, having left us at full speed to get free of the danger zone. We were still ignorant of how we were torpedoed and by whom. The station at Lussino was notified by one of our topedo boats. The other torpedo boats were ordered to encircle us. Several depth charges were dropped as a matter of precaution. In the meantime everything was done to stop the inrush of the sea. The morale of the crew held and everyone worked indefatigably. As the list increased, two boilers were lifted out of the water and were immediately put in operation and connected with the exhaust pumps. These two boilers were kept in service until the ship capsized. The boiler crew remained at its post and the heroic men were drowned at their stations.

The three centrifugal pumps were not sufficient to overcome the enormous inrush of the sea which, after breaking into the coal bunkers and magazines, entirely flooded the ship.

After great effort, mats were placed over the holes, but these were too small and all but useless. The roll of the ship added to the difficulties of placing the mats, and we were not certain as to just where the holes were.

At first an effort was made to balance the ship, but then a serious error of construction was discovered. The machinery for controlling this operation had been installed near the boilers which were now flooded, as were the Kingstons, under the deck mats.

Therefore it was possible only to flood the balancing tanks forward and aft of the boilers; this, however, could be done only as the list increased. The listing continued, though, and the com-

mander ordered the flooding of several of the port magazines, which righted the ship half a degree. The 150 mm. batteries were now under water and the men were bailing with buckets. The four cranes were turned to port immediately after the torpedoing.

The 305 mm. projectiles were thrown overboard, a very difficult operation with the ship listing 12°. Everything possible was done to save the ship. The scuppers and coal-bunker covers were made water-tight. The chances of saving the ship, however, became increasingly less. The crew, seeing that its almost superhuman efforts were without effect, began to lose hope. On the bridge we began to get news that some of the water-tight compartments were giving way; that the steel sides of the magazines were smashed, and that the whole ship was flooded.

The *Tegetthoff* tried to take us in tow. But when she drew up, some one thought he sighted the periscope of a submarine and began firing on the supposed submarine. The *Tegetthoff* also opened fire and, naturally, drew away at full speed. Although the supposed periscope was immediately recognized as a section of an antisubmarine depth charge, it was not easy to stop the firing, and the second time the *Tegetthoff* came up the wake of a torpedo boat was mistaken for that of a torpedo, and the firing recommenced.

It was only toward 5.45 a. m. that the *Tegetthoff* finally got the first cable aboard. The *Szent Istvan* was then heeling at an angle of 18° and it was almost impossible to walk upright. The batteries were now flooded and the ship keeled rapidly. The last angle of inclination I heard called out was 24°. All of the crew, excepting those detailed for towing, were grouped along the part of the ship still out of water awaiting the words "abandon ship." On the deck the loose gear began to roll about. About 6 o'clock the commander ordered me on deck to place one bugler forward, one amidships, and one aft to call the entire crew on deck. While the buglers were taking position the ship lurched heavily, and the starboard deck was already submerged. From the ship's bottom there came a heavy gorgelike rumbling, and I was then sure that within a few moments the ship would capsize. On hands and knees I reached the upper part of the ship. The crew were for the most part naked and some of the sailors jumped into the water. I looked toward the bridge where the commander, who had never left his post, was clinging to the fighting mast while the ship began to capsize. The chaplain stood in the bow blessing the crew. From all throats there came a great "Urra." This was at five minutes past 6.

The ship's bottom gradually immersed and I slid over toward the bilge keel which was then completely out of the water. When I

reached it the ship gave a sudden lurch and the bilge keel seemed to rise vertically before me.

I let go of the keel and plunged into the whirlpool, where I was sucked down and several times overcome.

In a few minutes the water became calm and my life belt brought me to the surface. I rose at about 80 to 100 meters from the ship which was still floating. Steam and water escaped from all its openings. I took off my oilskins and tried to make for the nearest torpedo boat. After a few strokes I turned about and saw the ship going down. The propellers rose out of the water for an instant and immediately afterwards the *Szent Istvan* went down by the head.

Some sailors were still clinging to the ship's bottom. Nothing but floating pieces of wood was now to be seen. With several sailors I swam toward a torpedo boat where we were taken aboard and wrapped in warm covers. We were taken to Brgulijo (Melada Island) where we were put aboard the *Teggetthoff;* 120 sailors, one lieutenant, one engine-room officer, and two ensigns were lost.

The dead and severely wounded were taken to Pola. We arrived that night at Sebenico where we were placed in the hospital of that Province and where I remained three weeks.

I lost everything except my pistol and the uniform I wore.

The motor boat that torpedoed the *Szent Istvan* was sighted by a destroyer, but only after the torpedo was launched.

HOLLAND TO PROTECT COLONIES.

12 August, 1922.

It is not at all surprising that Holland is considering increasing the defenses of her Indian Colonies. One has only to consider the extraordinarily favorable position of the valuable Sunda Islands as a base for the control of the commercial highway between Japan and Europe, etc., in the event of a war between two great naval powers in the Pacific and Indian Oceans. However, it is very difficult to pass a law regarding the Colonial defense.

The committee for East Indian defense worked out the draft of such a law already the middle of last year. The Indian Government submitted it to the National Council who passed it with a great majority. However, up to the present time, the law has never been put into effect. The proposal contained data regarding the proposed strength and organization of the naval forces, and the arrangement of bases and fortifications in the Dutch Indies as well as a proposal for the augmentation of the military forces.

The proposed law provided that that portion of the naval and air forces located in the Indies would consist of the following in 12

years' time: (The numbers in parenthesis give the number of vessels to be constructed within the first six years.)

Cruisers	(2)	4
Torpedo boat destroyers	(16)	24
Submarines	(16)	32
Submarine mine layers	(2)	4
Modern flotilla ships	(4)	4
Mine layers	(9)	9
Submarine with the necessary auxiliary ships	(1)	1
Scouting planes	(108)	72
Hunting planes		18
Fighting planes		18

On account of the rapid strides being made in the development of battleship construction, it is expected that the greater part of the proposed vessels will be finished within the first six years.

A main base will be established at Tandjong Priok in the immediate proximity of Batavia, the capital of Java. There are to be two additional auxiliary bases, one on the Riouw Archipelago and the other in Soerabaja, Java. These fortifications must be completed and equipped within six years. Tandjong Priok will be fortified by a battery of heavy guns in armored turrets on the island of Edam. Another battery is to be erected in Makassar on the island of Celebes. Mine barriers in the vicinity of the medium artillery are also planned.

The proposed law also plans the extension of the army hand in hand with the reorganization of the fleet. Two new divisions will be organized and in addition several independent divisions outside of the regular divisions. According to the proposal, each division will consist of the following:

Three infantry regiments of three battalions each.

One cavalry company of three divisions.

One artillery regiment, consisting of one division of field artillery, one division of mountain artillery, and one division of motor artillery of 12 guns.

One company of engineers with the necessary training and auxiliary troops.

Two airplane divisions of three squadrons each, consisting of two divisions of hunting planes, three divisions of scouting planes, and one division of artillery planes.

New constructions are absolutely indispensable for the perfection of the equipment, which shall be thoroughly modern throughout; and for the greater versatility of the army 690 self-loading guns and 190 heavy machine guns with the necessary ammunition are considered necessary. Light guns are proposed for infantry reserves and antiaircraft guns for combatting enemy planes.

According to the Government's estimate the yearly expenditures will be approximately 88,000,000 guldens—that is, 5 per cent of the

entire expenditures of the two budgets for Holland and the Dutch Indies.

The proposal was discussed in the Lower Chamber in January of this year. The majority greeted the proposal. Several members, however, opposed such a naval bill, partly from economical motives and partly from opposition to apparent militaristic tendencies. The minister gave the standpoints of the various States relative to the naval proposal. The Dutch Government is of the opinion that it would be inexcusable to neglect the defense of the colonies on account of unfavorable financial conditions. According to the opinion of the naval experts, the experiences of the war have shown that the small ships are very much more valuable to-day than formerly. In all probability, in case of war, the main forces of two large naval powers would tie up one another. But it is very certain that for a long time, the Dutch fleet would have to contend alone against a main power. So that in no event would the defenses be useless. The Government also does not share the opinion of the member that after the plan was carried out, the material would be obsolete on account of the rapid technical advances. The experiences of the war have shown that the type of ships proposed are the most suitable, and within the short period of six years no very great alterations would be made.

In the meantime, the central savings committee of the "Niederländischen Gesellschaft für Handel und Industrie" (Dutch Commercial and Industrial Co.) has carefully studied the fleet proposal and has presented a retrenchment program to the Lower House. In March of this year, a modification of the proposed law was put forward, covering the extension of the construction period for the several bases. According to this, it is recommended that the expenditures proposed for the first year be reduced on account of the Indian financial situation. It is proposed to make the period 10 years in place of 6 for the construction of the bases. It is estimated that this will mean a saving of 42,000,000 gulden.

No agreement has yet been reached in this matter. It remains to be seen when the proposed bill, with eventual alterations, will be made a law.

NOTE.—It has been learned from a reliable source that a Dutch merchant ship has recently passed through the Suez Canal bound for the Far East with a cargo of about 650 mines.

THE ITALIAN FASCISTI.

Source: Guiseppe Prezzolini.

15 July, 1922.

Italy is a democracy ruled by public opinion. I make the observation, for the benefit of Americans especially, to emphasize the fact

that we are not, like the people of the United States, a democracy ruled by political parties. The distinction here is a fundamental one. The great movements of popular feeling in the United States eventually find their expression in the two leading parties, Democratic and Republican, which keep their names, but change their platforms and their war cries from election to election. The will of the American people is worked out through the machinery of its Government.

There is no such intimate connection between the Italian Government and the Italian people. In the American sense political parties do not exist in Italy. Only two political groups, the Socialist and the Clerical have, from the definiteness of their principles and the relative weakness of their forces, anything approaching the organization of the American political party.

In reality the Italian Government is merely an administrative organism, a bureaucracy charged with managing the various departments of public service—police, railroads, posts, telegraphs, customs, schools, tobacco, charities, and so on. As such it is a body of separate interests, the interests of patronage, toward which the public at large is suspicious when not actually hostile. In Italian political elections, whatever the minor, the temporary issues, the major issue is inevitably patronage, an affair, therefore, of the officeholder or the prospective officeholder.

Americans were doubtless much surprised that in the last two elections, when Italy was a seething hotbed of passionate agitation, hardly 50 per cent of the electorate went to the polls. To us that seems quite natural, for the Italian public does not look to its Government for civic leadership. The Government is never more than an arbiter between the great factions in public opinion, which expresses itself independently of the political bureaucracy when not in open opposition to it.

So, when looked at from abroad, and especially from a fully evolved democracy like the United States, Italy seems frequently on the verge of revolution. The Italian people are up in arms on this issue or that, while the Government stands by as an idle spectator. Patriots seize Fiume, workers seize their factories, Fascisti finally go romping up and down the peninsula at will; then, suddenly, in a day or two, a week or two, everything is over; the revolution has not come off. The foreigner is mystified.

The fact is that in every such case a great battle has been fought in Italian public opinion, and when each side has "shown its hand," demonstrated its power, the weaker side submits. There may have been, meanwhile, no change in the Government at all, especially if the bureaucracy of officeholders has been prudent enough to keep neutral in the struggle.

The "comitium," the "vox populi," the "assembly of the people" is still the fundamental, the instinctive political institution of the Italian people. Just as in the old days, at the sound of the tocsin the populace rushed out to the public square to determine policy in great crises, so, with due reserves, it does to-day.

The first Fascisti organizations sprang up in Trieste in the late winter and spring of 1919. The territories conquered in the war from Austria and still awaiting disposition from the peace conference in Paris were a chaos of conflicting propaganda. The Yugoslav population, in its three mutually discordant branches, the Serbs, Croats, and Slovenes, were staging anti-Italian demonstrations. From Italy came an agitation of two kinds, that from the Socialists, who were counting on the disorganization of the devastated regions to find allies for the coming revolution; and that from the Nationalists, determined to realize the extreme program of the Italian imperialists, which involved the annexation of Istria, Fiume, Dalmatia, and southern Albania.

Throughout Istria and Julian Venetia the more ardent Italian patriots, under the protection of an army of occupation, disgruntled and demoralized by delayed demobilization, united to intimidate their foes of different colors. There were clashes with the Yugoslavs; there were clashes with the Socialists. To the occupied regions flocked the most adventurous spirits of Italy, "arditi"—the shock troops of the army, selected for their dare-devil courage—decorated heroes, much set up by the publicity they had been enjoying and loathe to return to the humbrum labors of peace; demobilized officers and soldiers who had not as yet been able to find employment in civil life.

Read the speech that D'Annunzio made to his comrades on his squadron of airplanes—the famous *Serenissima*—in proposing an Italian trip by air to Tokyo. It was a gloomy, drizzling day in camp, a camp of peace times, with no hope of combat on the morrow. The atmosphere of depression and irritated boredom appalled. For four years Italian heroes had been pouring out their blood in defense of a great cause. Life had been thrilling, inspiring, intoxicating. Suddenly, with peace, it had lost meaning. Colorless and mournful the future stretched out before men who had known existence in its most tremendous manifestations of effort and action. The flight to Tokyo appealed to the poet as a semblance of another great adventure.

It was not to Tokyo, however, that D'Annunzio and his comrades went. They went to Fiume, and the raid on Fiume, the achievement of a handful of patriotic enthusiasts, brought to the war-strained nerves of a few thousand restless men the excitement they were craving.

The Fiume episode was the great expression of the Fascista spirit in the first phase of the movement; it was also the most dangerous to the Italian monarchy; for the adventurers chose an issue on which they could count on virtually unanimous support from the amorphous Italian public. The Government could do nothing but wear the morale of the raiders out by a policy of strict inaction.

An observation is in point here. The theory of direct action, though of Syndicalist origin, has been part and parcel of Italian Nationalist doctrine from the beginnings of that party, just before the Italo-Turkish War. According to that theory, of which a brilliant exposition was made by the Frenchman, Sorel, 15 years ago, and in the interests of the proletarian revolution, the course of history is determined not by the stolid, unthinking, comfortable majority of citizens, all engrossed in their daily concerns of business and pleasure, but by the self-conscious minority, which knows what it wants, and at the strategic moment imposes its will, by violence if need be.

The writers of our "new nationalism" perceived the utility of that doctrine for the purposes of the middle classes as well as of the proletariat. Our old Nationalist locals of 1914, for instance, met the Socialists on their own ground, exchangeing blow for blow.

Present-day "fascismo" is, in this respect, only a continuation on a larger scale, of this earlier nationalism. The Fiume episode illustrates the direct action of a minority on a legally constituted majority (the government of Mr. Nitti). At a time when the Nationalists had virtually paralyzed the ministry in Rome they had one representative in a Parliament of 509.

Here the paramount issue was the country's foreign policy. In the second phase of "fascismo," where the Provinces of Emilia and Romagna, and no longer the reconquered territories, were principally involved, the point in question was domestic policy—Socialism.

In this, the more striking of its manifestations, the Fascista movement presents an interesting paradox. The originators and leaders of "fascismo" were not, as often stated, and as might be supposed, men from the reactionary middle classes, but ex-Socialists, often of the most revolutionary type; ex-anarchists even.

Umberto Pasella, general secretary of the Fascisti, writes: "The first legend I must refute is that we constitute a sort of 'White Guard' in the service of conservatives, reactionaries, and profiteers. We have, as a movement, nothing to do with the empty formulæ, the vacuous platform of the past. Our leaders belong to the advanced posts of progressivism. They are all anxious for reform, change, improvement in public life. Benito Mussolini, the founder of our organization, is an ex-Socialist (revolutionary). On our executive

council in Milan are Enrico Besana, a former comrade of the arch-Socialist Constantino Lazzari; Cesare Rossi, a syndicalist; Leandro Arpinati, an ex-anarchist; Amedo Buttafava, a revolutionary workingman from Sampierdarena. On our committee, in fact, we have only one man of thorough nationalistic extraction—Piero Marsich, of Venice. So much for our 'General Staff.' As for the rank and file, I may say that in all Italy we have scarcely 500 members living on incomes. Our followers are for the most part boys of very moderate means, professional men, returned soldiers, students, men who have come back from the front animated by unselfish ideals and burning with noble enthusiasm—the will to purify Italian public life and restore the moral fiber of the Italian nation."

Nationalism, in the sense of a burning love of country, is, for that matter, characteristic of certain elements in the otherwise radical parties of Italy. Alceste de Ambris, for instance, exiled only a few years since for establishing an abortive syndicalistic republic in Parma, was vice regent of Fiume under D'Annunzio. The Italian Seamen's Union, of which the picturesque Giulietti is chief, is an organization of patriotic communists who on the one hand kept the patriots of Fiume well provisioned from the sea, and on the other repatriated Errico Malatesta, the anarchist leader, from England. And just as we have nationalistic radicals, so we have radical nationalists. The first seizure of a factory in Italy was made not by socialists, or communists, but by some very conservative workingmen, veterans of the war, in the Province of Bergamo.

Though we speak of its "leaders," its "councils," its "committees," we must not infer that the Fascisti have a responsible organization, with headquarters and an address. "Fascismo" is a vague, a formless movement; it is a state of mind, a spontaneous understanding, rather, of certain elements in the Italian population. It is almost a matter of temperament. We look in vain for a coherent body of political opinion among the Fascisti. Some are Republicans, but others profess devotion to the monarchy. Some, as we have seen, are socialists, anarchists, while others are extreme conservatives. That is why we get closer to the spirit of the Fascisti by studying men rather than ideas or political theories.

ITALIAN DESIGN OF PROJECTILES.

Source: Ordnance Expert of the United States Army.

28 July, 1922.

(I) DESIGN OF PROJECTILES.

No evidence was found of any considerable Italian experimental work on the design of ammunition, but the Italians are adopting the French results and are proceeding to design and construct

a whole new series of projectiles. These projectiles all have long ogives, stream-line bases, and, in the case of the larger calibers, windshields. The drawings of a number of these projectiles were requested, and it is hoped that it will be possible to submit these along with the report to the Aberdeen Proving Ground.

The Italian officer in charge of the design of shell for the navy seems to expect increased range from the stream-line base at high muzzle velocities as well as at low ones.

This officer did not, however, seem to have any very extensive theory on the design of shells. The only experiments which he used were actual firings. He had it clearly fixed in his mind that false caps and stream-line bases were very desirable from the point of view of range. He thought that the effect of a false cap was due to increasing the moment of inertia about the axis of the shell.

The Italian Navy seems to be using a considerable number of shells with false caps and without great armor-piercing power. They consider that there is a great deal of use for such shells against the lighter types of boats and they consider that they have obtained good results from these projectiles in actual practice.

Drawings were seen of a light-weight shell for the 301 mm., 40 caliber gun with a false cap, with a nearly conical ogive and meplat. The shell itself has two compartments for the explosive and an armor-piercing head. The charges are held in their exact places by pieces of wood.

False caps have been found to give from 20 to 25 per cent increase in range in the Italian 150 mm. naval shell.

The so-called monobloc projectile for the 305 mm. howitzer which has a long ogive and a long boat-tailed base, the boat-tailing being about 6 inches, was said at Cirie to have given a range of 3 kilometers more than the other projectiles used in this gun and a muzzle velocity of 450 meters per second. The range was about 14,000 meters. The shell is called monobloc because it is made in a single piece. On this account it is necessary to cast the explosive charge in the shell instead of loading it in the usual Italian way.

The rotating bands as used in the Italian Navy seem to be very similar to those used in the British Navy, but double rotating bands similar to the French ones are also used. The position of the rotating bands is considered as important. Moving the band backward toward the base of the shell was thought to have improved the dispersion in some cases. In testing ammunition, the engraving of the rotating bands is carefully inspected.

At Nettuno the Italians are working on a design of a new projectile with stream-line base, long ogive, and a small false cap which in preliminary trials has given 20 per cent more range than the old types of projectiles. This projectile has a double wall, being

grooved in squares so as to give uniform fragmentation. The explosive charge is in a paper cylinder as in other Italian projectiles. The charge is calculated to be large enough to secure the burst of the shell and the inner wall increased the amount of available fragmentation. The fuse is of a French type with a long spiral powder train and a small aluminum cap. A copy of the drawings was promised.

One of the striking features of the design of Italian projectiles as seen at the loading plant at San Bartolomenio is the fact that the various parts can all be made separately and all assembled at once; in particular, the explosive charge is made up in the form of a paper-inclosed cartridge. The T.N.T. is pressed together and not cast.

The Italian method of loading shells makes possible great precision in the balance of the shell because the charge is held in its exact position by felt washers and blocks of wood. It also makes it possible to keep the weights of the shell very uniform. The Italian Navy is going in extensively for false caps on their projectiles.

A wooden wind shield has been developed for use in connection with antisubmarine projectiles. These projectiles have either a square or a slightly concave head in order to secure penetration into water without ricochet at small angles of impact. Such a projectile, of course, has a very bad ballistic coefficient while it is going through the air. To obviate this a wooden false cap was provided of a specially fiberless wood which is entirely destroyed when it strikes the water. This is said to have worked successfully so that the shell had both good flight in the air and good penetration into water. The shell was 65 mm. caliber. This sort of a false cap may well turn out to be useful in other connections.

It was stated that some rifled projectiles of the Charbonier type are being manufaactured for experimental purposes.

FIUME AND ITS FUTURE.

28 July, 1922.

1. President Zanelli is hot-headed and not politic, but honest and first, last, and always for Fiume as an independent entity. He is neither pro-Italy nor pro-Yugoslavia, nor anti-Italy nor anti-Yugoslavia.

2. He is an able man and knows the needs of Fiume.

3. British commercial interests will probably advance the Fiume government money in return for concessions, but Zanelli has served notice on all business interests that he will grant no monopolies. The British and Standard Oil interests are active in trying to secure concessions.

4. From the following report it would seem that Fiume is destined to become a very important port, and that America should watch the development with a view to sharing in the benefits to be offered.

The following report is strictly up to date.

GOVERNMENT OF FIUME.

The Port of Fiume and its Future.

The port of Fiume is destined to become a most important center of traffic between middle Europe and the maritime nations.

It represents through its position and its facilities an ideal traffic bridge, open to all Mediterranean and oceanic enterprises which may wish to place themselves in direct contact, and by the most speedy and economical way, with the markets of central and southeastern Europe.

In spite of political divisions and disturbances, traffic always ends in seeking and finding its natural outlet.

Geographical laws and economic interests force forward, little by little, their demands and the transitory difficulties are destined to disappear in succession, because interests and advantages always bring to the dissidents a common interest based on reciprocal concessions.

It is for such reasons that Fiume has been able to become, by the will of Hungary, a great maritime port, and its constantly increasing development in these last 40 years proves and confirms the excellence of its geographical situation as regards the maritime needs of the hinterland.

Let us examine three stages of the maritime traffic of Fiume:

	Tons.
1875	188,000
1888	821,000
1913	2,890,000

In 1913, the last normal year before the war, Fiume reached the high figure above, in spite of the competition of Trieste, because the two cities had hinterlands geographically different and the interests of the one did not affect those of the other.

There is room for all to-day as in the past. The political changes have not suppressed the hinterlands of the two cities, which remain always the same, both, within a little, effected in the same way by the terrible economic crisis of after the war. The rehabilitation will be a question of time, and neither Fiume nor Trieste will fail to reap the rewards that the future reserves for them.

In the Adriatic system of middle-southeastern Europe, Venice, Trieste, and Fiume will represent a powerful group of competitors against the other system of northern Europe, which, by means of

Bremen and Hamburg debouches on the North Sea, dominating the Baltic and the waters of the Scandinavian countries.

Fiume is destined to recover all her natural hinterland; quite different from that of Trieste, and will offer in particular to Italy the quickest route of communication, not only with Yugoslavia and Hungary, but also with Rumania, Russia, and Turkey.

It is through Fiume that Italian industry, as well as that of other countries, will be able again to push their products into the Balkans and toward the Levant.

JAPANESE INTERFERENCE IN CHINESE CIVIL WAR.

19 July, 1922.

1. The antipathy of General Wu Pei-fu to the Japanese is well known, he having on more than one occasion forcibly expressed his opinion of them and denounced them in no uncertain terms for their underhand and treacherous methods in attempts to gain political and economic control over some of the most important and valuable parts of China. General Wu in interviews last year, before he became the dominating figure in China, stated that he would not indorse any government in Peking under Japanese control or influence and would exert all his power to eject such a government. It was the pardoning of the Anfu political prisoners by Premier Liang Shih-yi December, 1921, and the Premier's instructions to the delegates to the Washington Conference to give in to Japan on the Shantung negotiations, which turned Wu Pei-fu so violently against Liang Shih-yi and his cabinet and made him determined to oust them from office. This he finally succeeded in doing in spite of the fact that Liang Shih-yi was supposed to have the support of General Chang Tso-lin. General Wu denounces all Chinese whom he considers under Japanese influence as traitors to their country, and in this respect he considered Gen. Chang Tso-lin to be one of the worst offenders.

2. Gen. Wu Pei-fu asserted that Chang Tso-lin had a secret pact with the Japanese agreeing that the Shantung Railway should not be redeemed. Concerning this Dr. C. T. Wang, director general of retrocessional affairs in Shantung, stated to Mr. Upton Close, a newspaper writer:

> The Japanese delegates in Washington, upon their own initiative, first suggested that pending the redemption of the railway an assistant traffic manager and an associate Japanese accountant be retained in the railway management. Following Chang Tso-lin's installation of Liang Shih-yi as Premier and the well-known visit of the Japanese Minister, Obata, to the Premier's office, this mild request of the Japanese delegates at Washington was suddenly changed to a demand for a Japanese traffic manager, accountant, and chief engineer.

As you know, through the good offices of President Harding, Mr. Balfour, and Mr. Hughes, a compromise was finally arranged whereby the Japanese have a traffic manager and associate auditor, but these men must work under a Chinese director. Since the entire staff, aside from them, will be Chinese, and presumably in sympathy with the Chinese director's policy, it is not anticipated that their presence in the administration will make possible any discrimination on behalf of Japanese interests. It is natural that the Japanese should insist upon a traffic manager inasmuch as they fear, although I can assure them that their fears will never be realized, that the Chinese will retaliate for past discrimination against Chinese interests.

3. General Wu has apparently indoctrinated his soldiers with this anti-Japanese feeling and his determination to release China from the clutches of Japanese intriguers, for the actions of the Chihli soldiers in the recent fighting showed that they were thoroughly imbued with this idea. On returning late in May, 1922, from a trip to Wu's army an observer made the statement that over 200 officers of Wu's army brought up the subject unsolicited of how much they hated the Japanese.

4. One needs scarcely go back beyond the present year, if reports are true, to see that this feeling of General Wu toward the Japanese is fully justified. Also the many actions of Gen. Chang Tso-lin in his dealings with the Japanese show beyond doubt that he has favored the Japanese; that he has accepted their assistance on numerous occasions so much so as to be greatly in their power. Gen. Chang Tso-lin stated to Mr. Marcosson, the well-known writer for the Saturday Evening Post, that he had borrowed many large sums of money from the Japanese because they were always willing to lend to him when other sources were closed. Japan has been satisfied with Chang's rule in Manchuria and would be pleased to see him retain power there and, of course, as much as possible over the Peking Government. At the beginning of the conflict between Gen. Chang Tso-lin and General Wu in north China when General Chang was moving his troops into Chihli it was rumored, and since verified by a representative of the British-American Tobacco Co., that Japan had consented to assist General Chang by permitting some of his troops to be moved over the South Manchurian Railway to Dairen for further transportation by steamer to Tsingtao, where they were to be landed and marched overland to the rear of General Wu's army. The British-American Tobacco Co. were told that there would be no cars available for their goods until this movement of troops was completed. The movement over this railroad, however, did not take place. After General Chang's defeat at Changsintien he retreated to the vicinity of Chinwangtao, where he was reinforced by fresh troops reported to have been equipped with new Japanese rifles. It was also reported on June 11 that in the fighting the day previous General Wu's soldiers had captured three Japanese spies.

Concerning the Japanese participation in this fighting, the Peking and Tientsin Times of June 15 makes the following comments:

> The report that Japanese spies have been captured by the Chihli forces is perfectly true. Three Japanese, dressed in Chinese clothes, were captured in the hills near Chinwangtao, making their way toward that city. They stated that they were proceeding thither on business, and were accordingly escorted into Chinwangtao. Later they were found, in civilian clothes, attempting to make their way back to Shanhaikuan by the seashore. They were therefore arrested and detained, and eventually handed over to the local Japanese military post to be dealt with. The Chihli leaders do not appear to have treated the incident very seriously, because they are confident of victory, regardless of the assistance that may be rendered by the Japanese to their foes. But it may be hoped that the Japanese authorities will not dismiss the affair as trivial on that account. And foreigners, regardless of their nationality, who participate in a struggle of this kind ought to be severely dealt with, if only because such participation is the thing best calculated to cause antiforeign feeling among the troops engaged.

5. It appears that when General Chang Tso-lin's troops were in the vicinity of Chinwangtao they cut all the telegraph and telephone wires excepting those belonging to the Japanese. Later, when General Wu's troops occupied the place they, in retaliation, cut the Japanese official telegraph and telephone lines and prohibited Japanese soldiers from entering the platform at the station in spite of the fact that the Chinwangtao section of the railway is under the jurisdiction of the Japanese garrison according to the Boxer protocol granting foreign troops permission to patrol and maintain order along the railway from Peking to Shanhaikuan. The Japanese general in command of the Japanese troops at Tientsin on June 22 protested to General Wang as follows:

> Your reply to my protest lacks sincerity. We did protest when General Chang interfered with railroad communications and I demand that Japanese be not prohibited from entering the station platform or interfered with in the performance of their duties as set forth in the protocol.

The Chihli troops, however, not only failed to listen to this protests, but when some of the Japanese soldiers had entered the platform to watch the arrival and departure of trains they were assaulted. The Chihli troops prevented the Japanese garrison from repairing damaged parts of the telegraph wires. Some of the Chihli troops went so far as to cut repaired telegraph wires in the presence of Japanese soldiers. Japanese reinforcements were immediately dispatched from Tientsin, arriving in Chinwangtao on the 25th, and paraded up and down the station platform to show their authority. This action on the part of the Japenese was considered by General Wu's officials to be very insulting. Commenting on this affair between General Wu's troops and the Japanese

at Chinwangtao, the Peking and Tientsin Times of June 26 prints as follows:

On Saturday morning 350 Japanese troops left Tientsin for Chinwangtao, following General Suzuki's protests against the interference of the Chihli forces with the Japanese military posts at Chinwangtao and elsewhere. It appears that at Chinwangtao, where a Japanese post is always maintained for the enforcement of the provisions of the 1901 protocol, the Chihli troops attempted to confine the Japanese to one platform, refusing to allow them to move to any other part of the station. It is understood that strict orders have now been issued from Paotingfu that there is to be no further interference with the Japanese, but previous to the issue of these instructions it was decided to reinforce the Japanese post at Chinwangtao with a view to enforcing compliance with the protocol. There is unquestionably strong anti-Japanese feeling among some of the units of the Chihli Army, but their officers ought never to have permitted it to be manifested in continuous interference with Japanese military forces engaged in the enforcement of treaty stipulations, and it is to be hoped that apart from the fact that Japanese reinforcements have now been dispatched to Chinwangtao, Gen. Wu Pei-fu will see to it that any further provocation of the Japanese military is severely dealt with.

6. That Wu's troops had an intense hatred for the Japanese was recently confirmed. General Peng refused to see the Japanese commander of the international special on one of its trips to Chinwangtao. The Japanese captain in command of a Japanese cruiser at Chinwangtao reported to an American officer that a sentry of Wu's army at the railway station had refused to let him go on the platform. The Japanese captain asked the American officer what could be the cause of such attitude on the part of Wu's troops and asked for advice in the matter. During the war Wu's army was at Chinwangtao the Japanese were afraid to send an officer ashore from the cruiser unless accompanied by two sailors. There has been no further trouble at Chinwangtao since the Japanase have reinforced the garrison. Both Generals Wu and Chang have been withdrawing their troops as rapidly as possible in accordance with the terms of the armistice.

7. Notwithstanding the above and the continued activity in stirring up strife in the maritime Province, there is no question but that the Japanese have adopted a more conciliatory attitude toward China and the Chinese. This is daily becoming more apparent since the Washington Conference. The arrogant, dominating, and aggressive manner which they assumed on all occasions a year ago has given way to an apparent effort to reach agreements which are fair to all parties concerned. Japan appears not only ready to carry out her part of the Washington treaties but is doing so ahead of the scheduled time much to the embarrassment of the Chinese who find themselves not prepared to take over the territory and properties under Japanese control. This was particularly so on the

Tsingtao-Tsinan Railway where the Chinese had much difficulty in collecting sufficient well-trained guards with rifles to replace the Japanese. This entire railway line, from the boundary of the leased territory to the Tsinan is now, however, under Chinese administration. Doctor Wang reports that the Japanese on this occasion rendered every facility possible and further reports that thus far the Japanese have not been in the least obstructive but on the other hand fair in all their dealings in connection with the retrocession.

8. The steps which Japan is now taking in China and Siberia certainly indicate that Japan is ready to carry out her part of the Washington treaties. They have withdrawn their troops from Hankow; have announced that all troops will be withdrawn from Siberia by the 31st of October; and have signified their readiness to give up their 23 post offices in China on the 1st of January, 1923. The first committee of the joint commission on Shantung dealing with the transfer of administrative rights and properties was held in Peking on June 29.

9. Dealing with Japan's policy toward China, Count Uchida, in an address to the governors of prefectures on May 29, 1922, stated that times have changed and that no nation can ever hope to benefit itself at the cost of others, and that Japan will maintain a strict policy of noninterference with China's domestic affairs and that the guiding principle of the imperial government in dealing with China is to promote mutual prosperity. Premier Admiral Baron Kato has repeatedly announced in public addresses and private conversations that he intends to see the treaties drawn up in Washington carried out by Japan in letter and spirit.

10. The victory of General Wu over Chang Tso-lin and the progress toward unifying China which has been made are most encouraging. It is believed that a united China is now a possibility and that a stable government will be realized and that before long China will be able to effectively guard herself against any efforts of the Japanese to gain control of her territory. With a united country, an efficient and honest government, all the powers will be willing to grant further reliefs, helping China in her problem of reconstruction.

JAPANESE AIRSHIPS.

24 July, 1922.

It is reported that the Japanese Navy Department has decided to purchase an A. T. type nonrigid dirigible from France, and that it is expected to arrive in Japan by April, 1923. Particulars not obtainable at this time.

It is also reported that the navy department has decided to obtain a Zeppelin rigid type airship from Germany. At present a large

Zeppelin hangar is being erected at the Kasumigaura Naval Aviation School under the supervision of German engineers. The estimated cost of erection of the hangar is $10,000,000. Parts of the hangar have already arrived.

BRITISH INSTRUCTORS' STATEMENT REGARDING JAPANESE AVIATORS.

24 July, 1922.

According to the vernacular press, the following statement was made by the British instructors to the Japanese naval and military aviators to a reporter and writer for the Nichi Nichi: "Aviation in Japan stands no chance of progressing at all during the next few years. The Japanese aviators have no sympathy whatsoever with their planes. Secondly, they possess no desire to conquer nature, and thirdly, their five senses are very dull, so dull in fact that they can not detect engine trouble by a slight change in vibrations; that they can not foresee a storm in the clouds or detect by the feel of the atmosphere the advent of a high wind or a change in the atmosphere. At all events, the five senses of the Japanese have not as yet attained a stage of development where they can hope to be successful in aviation and gas motors.

NEW ORGANIZATION OF JAPANESE FLEET.

31 August, 1922.

According to press reports, a decision by the bureau of military affairs on the new organization of the Japanese Fleet has been rendered as follows:

First fleet.

Battleships	3
Light cruiser squadron	1
Destroyer division	1
Mother ship and airplane division	1

Second fleet.

Battle cruisers	3
Light cruiser squadron	1
Destroyer division	1
Mother ship and airplane division	1

The third fleet is to be abolished.

The foreign service fleet to remain as it is at present.

The new organization of the fleets is to become effective in December, 1922.

JAPANESE NAVAL GUNS FOR ARMY.

28 August, 1922.

According to the Japanese press, the heavy guns that are to be taken from the ships of the Japanese Navy that are to be scrapped will be turned over to the Japanese Army for use as railway guns and to replace certain guns in fortifications. The 12-inch guns are particularly desired for these purposes, it is stated.

SHORTAGE OF FUEL OIL IN JAPAN.

28 August, 1922.

According to the Japanese press, Admiral Kato is urging the Japanese Government to purchase and store from abroad as much fuel oil as can be stored in Japan conveniently for the use of the Japanese Navy in case of an emergency. The production of oil in Japan is far below the amount needed for the Navy. Admiral Kato further stated that the production of oil in Japan has decreased from 450,000 tons to 300,000 tons during the past seven years, and that Japan possesses the largest number of vessels for the transportation of oil in the world. Continued efforts are being made to increase the production of oil in Japan, but so far have been unsuccessful.

NEW JAPANESE FUSE.

28 August, 1922.

A new fuse for use in the Japanese Navy has been invented which, as claimed by the Japanese naval officials, is far superior to any fuse now in use in the world. Details of the fuse are lacking at this time.

Since the explosion in the 14-inch turret of the *Haruna* on September 14, 1920, the Japanese naval authorities have investigated and found the fuses used by the Japanese Navy to be unreliable and unsafe and have been making many experiments trying to invent a new and reliable as well as safe fuse for the navy, which has resulted in the above invention. Extensive tests are now being carried on at the Kure naval station. An experiment board is conducting the experiments, and so far the tests show the fuses to excel any now in use in the world.

TARGET PRACTICE OF H. I. J. M. S. "MUTSU."

19 August, 1922.

The following additional data regarding the target practice of the *Mutsu* is furnished. The practice was held on August 9, 1922, in Saeki Bay. The effective range of her 16-inch guns was found to be

35,000 meters. During the practice while firing at about 28,000 meters, the *Mutsu* made 100 per cent hits, 10 hits out of 10 shots. Firing at 34,000 meters she made about 50 per cent hits, 5 hits out of 10 shots.

The board of admirals who witnessed the practice were greatly surprised and elated over the results of the firing of the *Mutsu*. Their opinion was that "Effective fire at 27,000 meters can not be depended upon at all times on account of weather conditions, but in time of battle if weather conditions were the same as at time of practice an enemy vessel can be sunk readily at this range."

JAPANESE PERSONNEL REDUCTION.

31 July, 1922.

According to the Japanese press, the following reduction in the personnel of the Japanese Navy is to be effected during August and September, 1922:

To be discharged (officers)	700
To be discharged (petty officers)	2,300
To be discharged (enlisted men)	8,000

The vernacular press continues to condemn the army and navy reduction as temporizing. A Japanese admiral has been quoted as saying the Japanese Army should be curtailed more drastically.

(NOTE.—The above reduction of naval personnel has not been made.)

JAPANESE VESSELS TO BE SCRAPPED.

20 August, 1922.

According to the Japanese press most of the Japanese vessels to be disposed of according to the Washington treaties will be either scrapped or converted into different type of vessels.

One, and possibly two, of the ships will be used as targets. The authorities desire to convert as many vessels as practicable into different type vessels so as to give employment to the navy yard workmen.

The *Mikasa*, *Aki*, *Satsuma*, and *Hizen* will be scrapped at the Yokosuka Navy Yard. The *Kure* and *Kashima* will be scrapped at the Kure Navy Yard. The *Setsu*, *Ibuka*, and *Kurama* are to be used for various ship construction experiments. The *Shikishima* and *Asahi* will be used for training ships. The *Kaga*, which is not completed and is at Yokosuka Navy Yard, is supposed to be used as a target for torpedo boats and airplanes.

CONDITIONS IN RUSSIA.

1 July, 1922.

There is much discussion and very real interest in the effect of the American relief work in Russia. The most prominently accepted idea is that the tremendous scale of the American relief, which is to-day feeding 10,000,000 people and is expected shortly to feed 11,000,000, means nothing other than that America has in large part saved the Bolsheviks from the most terrible of the economic consequences of their program. There is also the fear, particularly in the Polish and French general staffs, that the huge relief supplies which America has stored in Russia would be most extraordinarily useful to the Red army in case of war, for these supplies are concentrated and compact, and quite sufficient for the support of the entire Red army for at least four months. I must admit that there is an enormous volume of opinion that supports these points of view, for these supplies release other supplies which they can make use of, and to that extent I think our famine relief is useful to the Red authorities. But the Bolsheviks will not stand or fall because we send in famine relief or do not send in famine relief—the question is much greater than that. I think the reason people usually get on the wrong track is that they start out with the thesis that if the famine becomes bad enough the Bolshevik authorities will be destroyed. But I know of no theory that is so widely and generally accepted that is so absolutely and entirely wrong. The Bolsheviks will remain in the saddle just as safely even if the famine got twice as bad, or three times, or four times, or any number of times. In such event, all that will happen is that Russia, instead of having 120,000,000, will before long have 110,000,000, and then 100,000,000, and then perhaps 85,000,000; but in any case the millions that remain will be ruled by the Bolsheviks. Even the fact that for some years now the Bolsheviks have daily become stronger as Russia itself has become weaker has failed to make clear in the minds of those who do not really know the Russians that ruination has strengthened the Bolsheviks, and that the famine will keep up the process. It is as hard for some people to grasp this paradox as it was difficult for people to believe that paper money could have value unless there was something behind it, such as gold or other real assets, or credit and confidence. And yet we have seen that money with nothing but the thin air behind it, and even without any confidence, still has a value simply because of its enormous convenience as a means of exchange, i. e., each person accepts this money knowing very well that it is valueless, but expecting not to keep it, but to pass it on to his neighbor. To sum up months of study on the subject, I

would say that perhaps the most important truth we must now realize about Russia is that the Bolshevik control becomes the more absolute as the misery of the people increases, and that the famine, far from shaking their power, has only made it more absolute.

Another factor that is to be considered is the intensity of the terror felt all along the great long line of the Russian frontier, and felt, too, a great deal farther west. The peasants say that the series of famines which has already begun in Russia will before long become so terrible that the final result will be a migration of the famished hordes toward the west. Not only do the professors and students tell you of the migrations in history when the hordes of the East poured westward, for such stories are a part of the crude history which almost every peasant knows. There are many who explain that the Russians are after all a great Nomad race, that deep in their very soul is bred the idea of avoiding starvation not by thrift and saving in the years of prosperity, but by moving on from the country that is barren to the land that has plenty. The fundamental reason that communism has obtained such a wide hold on the Russians, say these people, is that the Russians are a nomadic race and as such have no deeply ingrained idea of private property. And even the peasant who has neither theories nor theorems has the dread that the hungry from the steppes will descend like a flight of locust and eat him out of his ground. The danger is not immediate, I think, but it does exist. When the hordes of the hungry come to their borders they will be shot down at the frontiers if they come simply as hordes. But if the hordes come as the Red army, still well fed but with the dread of hunger at their backs, then that is another question. And because I feel this so strongly I feel that the simple relief efforts of the various organizations now in Russia are doing a work far more valuable than all of the numerous political expedients from the "cordon sanitaire" idea of M. Clemenceau right down to Mr. Lloyd George's Genoa scheme could ever accomplish.

Among other things, I have been trying to get together accurate data on how much gold the Russians still have, and I found that the question has been interesting the Germans no less, and with German thoroughness they had been tracing the history of almost every ruble they could point their finger at. It has all been most surprising, for instead of the next to nothing with which the Bolsheviks are credited, the processes of addition and subtraction seem to indicate that the Bolsheviks still control several times the amount they are thought to have, and this notwithstanding the recent large donations, or allotments, to the interior States of the Soviet Federation. Not all of this amount is in their hands at the moment, but,

on the other hand, not all of the money that has been sent out of Russia has been expended. It appears that the Russians have really been very frugal with regard to their gold, and have surprisingly more on their hands than it has been thought. This sum is even exclusive of the 125,000,000 rubles of Rumanian gold which is still intact, but which the Bolsheviks would probably not hesitate long to use if the need required. Of course, the Bolsheviks want credits, for this would make their supply of gold last the longer, and they want to save this gold for purposes they consider more useful rather than spend it for things they will get for nothing, if the powers will give them credit; for foreign credits in the Bolshevik scheme of things is really a euphemism for getting something for nothing.

I was much interested in the forms of contracts the soviet delegation had offered to individuals and to groups of capitalists. I found numbers of Germans negotiating with the soviets, but these negotiations were apparently more for the sake of keeping in touch with the trend of events than for any purposes of really doing business at this time. In fact it was evident that people who were negotiating most earnestly with the Bolsheviks had the least idea of doing business with them. The principle of all these concessions was that if the company to be formed to conduct the business included Bolshevik Government partnership in the profits, the concessions and facilities offered were enormously increased, but the stumbling block was invariably some additional condition insisted on by the Bolsheviks, generally to the effect that the companies must agree to hold themselves in readiness to furnish to the Bolshevik Government on demand a loan of from 60 per cent to 120 per cent (it varied in different contracts) of the full capital of the company. The Bolsheviks were proposing all manner of odd schemes but all having one thing in common in that they were equally fantastic and impossible of execution. The soviet delegation proposed to one company that it deliver its entire products to the Soviet Government, which was to act as its agent in disposing of the same. The Soviet Government agreed to remit all customs, transportation and other charges, and to pay all expenses in connection with the sale of these products. In return for these services the Bolshevik Government was to receive 50 per cent of the gross profits. Of course, no company would accept any such terms for it was equivalent to selling things to the Bolshevik Government entirely on credit—a thing which no one would do. I saw the contracts which had been offered to a number of firms and they were indeed a remarkable evidence of the naïvete of the Bolshevik theorists; some of them were ingenious and some were simply fantastic, but they were one and all impossible because they contained some version of the clause to the effect that

the company concerned was required to hold itself in readiness to make a loan to the Bolshevik Government, or other clauses amounting in effect to turning over merchandise to the soviets without any security whatever concerning payment.

FAR EASTERN REPUBLIC.

14 July, 1922.

Report of a conversation June 5, 1922, with an American, who has been in Tchita, the capital of the Far Eastern Republic, for some time and has within the past few weeks made the trip from Tchita to Berlin by way of the Trans-Siberian Railway.

The informant stated that the entire journey from Tchita to Berlin covered 69 days, including delays and stopovers of various kinds, and that the trip from Tchita to Moscow covered 13 days, including a stop of some 30 hours in Irkutsk and of some 10 or 12 hours in Omsk.

FORMATION AND REVENUES OF THE GOVERNMENT.

The general formation of the Government is as follows: At the head a supreme council of seven, which consists of the President, Vice President, and five counselors. Underneath this council is the ministry, composed of the President who corresponds to the Prime Minister of the German Republic, and eight or nine ministers. Then comes the National Assembly which consists of about 125 members chosen by universal suffrage from the various districts of the Republic.

He stated that the Government of the Far Eastern Republic is really functioning in a more or less satisfactory manner. The Government budget, amounting to 15,000,000 gold rubles, is covered by an income estimated on paper at 20,000,000 rubles, but that the real revenues of the Government do not exceed more than half of this amount. The deficit which last year amounted to nearly 10,000,000 gold rubles was made up by the Russian Soviet Government.

INTERNATIONAL RELATIONS.

The relation between the Government of the Far Eastern Republic and the Russian Soviet Government is very close. One of the cabinet ministers stated to the informant that the reason for the independent existence of this Republic no longer existed. The Republic was originally created with the sanction of the Russian Soviet Government and in that part of the world occupied a position not unlike the Baltic States and the Trans-Caucasus Governments of Georgia and Azerbaijan. This minister was of the opinion that the time would soon come when the Republic would be reunited to Soviet Russia in that its military problems, the army and foreign

relations would come under the supervision of the Russian Soviet Government, its ultimate relation to the Russian Government being similar to that of Hungary to Austria in the old dual monarchy.

RAILROADS.

The roadbeds are in serviceable condition, bridges, siding, etc., being intact. They are in need of some slight repairs. There are about 300 locomotives in operation in the Republic. Considerable rolling stock, probably enough for the normal needs of the country except for the fact that many of the wagons are out of commission. The railroad repair shops do not operate satisfactorily. The informant had, just before leaving Chitta, seen two Russian military trains going eastward, consisting of 120 cars, loaded with soldiers, carrying a little artillery, about 10 light guns (12-pounders). The ultimate destination of these soldiers was alleged to be Kamchatka for the purpose of exerting influence in the fishery disputes that were coming up between Japan and Russia in that locality. Many soldiers are moving to and fro along the railway line between Kamchatka and Moscow, such as might be expected of men on leave of absence, but no troop movements were visible along that part of the railway.

The American made the trip in a private railroad car without change from Chitta to Moscow. This car was assigned for the transfer of a Chinese mission consisting of three persons to Moscow. Three-fifths of the car was allotted to the Chinese and two-fifths to the informant and his family. All other cars on the train were third and fourth class cars, in which the people struggled for places in a more or less good-natured way like cattle. There was no such thing as reserved seats in any of the cars except this private car.

JAPANESE POLICY IN THIS REGION.

The Government of the Far Eastern Republic operates independent of Japanese domination, and last April relations were broken off between Japan and the Republic on account of a series of demands made by the Japanese Government, which were as follows:

(*a*) Free and unrestricted navigation of the Ursa River by the Japanese.

(*b*) The occupation of the seaports of Vladivostok from Vladivostok to Nikaliaovak, inclusive, which would give Japan complete control of all entries or exits in the Far Eastern Republic and including control of the Chinese Far Eastern Railway.

(*c*) The right to maintain a mission in Chitta, with more or less plenary powers.

(*d*) The privilege of exploiting all minerals in the territory in the Far Eastern Republic. The most important feature of this concession is the Sakhalin oil fields.

Should the Far Eastern Republic accede to these demands, it would of course be entirely a tributary state to the Japanese empire in so far as its exterior relations are concerned and including the exploitation of its mineral wealth. There is an intense hatred of the Japanese in the Far Eastern Republic, and this was observed throughout Russia along the entire line of travel.

The hatred of the Japenese was particularly noticeable when any of the Chinese passengers in the informant's car showed themselves at the windows in any of the railway stations along the line as far as Moscow. Crowds of angry Russians immediately assembled in front of the windows, but were very readily pacified when it was explained to them they were not Japanese but Chinese bound for Moscow on official business. Another important item in the attitude of the Japanese is that while they occupy Vladivostok and its surrounding territory, they apparently recognize it as pertaining to the Far Eastern Republic and are at present negotiating with the government of this republic with reference to their future concessions in this port. (This is probably a ruse on the part of the Japanese to obtain what they consider a legitimate authority over the port of Vladivostok because of the fact that they know such authority can never be obtained from the Russian Government proper.) The securing of Vladivostok port to the Japanese would give them complete control of the sea terminus of the Chinese Eastern Railway.

ECONOMIC.

The Far Eastern Republic is not capable of conducting much foreign business at the present moment, except such as could be paid for in actual gold which, of course, is extremely limited. They have no supplies which they can export in return for goods received except minerals, gold being the principal ore.

The agricultural situation looks promising, both in the Far Eastern Republic and along the line of the railway toward Moscow. Crops are planted, and if a reasonable amount of rainfall is secured there seems to be fair prospect of a good crop.

In Russia no factories were seen smoking at any of the stations along the way. On being questioned particularly about the vicinity of Perm, the American stated that he saw no signs of large factories on passing through this city. This is supposed to be one of the centers of munitions manufacture of the Soviet Government, but no extensive factories were visible from the railroad and none smoking.

All railroad stations are thronged with people who are apparently just waiting at the station. They seem to have no particular aim to travel farther. At stations in the vicinity of famine regions the throngs are much greater and there the people with their small

handful of personal belongings are sleeping in the railway stations and surrounding sheds. There is some begging in these crowds, but this is not general.

The informant spent some time in Moscow where he talked with various foreigners there. He found British representatives exceptionally well informed. He said he talked with two or three representatives of the American Relief Administration and found that they knew comparatively little of the general situation. In Moscow itself tram cars are running, droshkies are for hire, and on the surface the normal life of the city seems to exist. There is much need of repair to buildings

The Far Eastern Republic has a very strong desire for recognition by the United States and I gathered from his remarks that he himself is in sympathy with such action. On being asked what he thought of the policy of the United States toward Russia, he said that he regarded it as sound and sensible. This is apparently contradictory to his more or less sympathetic attitude toward the idea of recognition of the Far Eastern Republic by the United States. In other words, it is to be inferred that personally he is in sympathy with the Far Eastern Republic but believes that the policy of our Government toward Russia is sound.

WITHDRAWAL OF SPANISH TROOPS FROM MOROCCO.

22 August, 1922.

The withdrawal of Spanish troops from Morocco is being continued and every effort is being made by the Government and the new high commissioner, Gen. Burguete, to terminate all military activity and restore order in the country by peaceful methods. However, the situation is far from satisfactory, as many of the Moorish tribes refuse to be pacified and surrender their arms; they also still continue to hold some four or five hundred Spanish prisoners. It seems fairly probable that there will be a fresh outbreak on the part of the Moors if the withdrawal of Spanish troops continues.

It was recently announced in the press that all the available aircraft were to fly over the territory occupied by the rebellious tribes, dropping proclamations giving them very favorable terms for submission and offering to ransom all prisoners, paying from 5,000 to 50,000 pesetas for each prisoner.

Meanwhile, the Spanish are keeping quite a large naval force in Melilla, consisting at present of the following vessels:

Battleship	Alfonso XIII.
Cruiser	Cataluña
Gunboats	Recalde.
	Lauria.
	Laya.

Coast guards	Larache.
	Rio Martin.
	Tetuan.
	Alcazar.
Destroyers	Bustamente.
	Audaz.
Torpedo boats	Nos. 19 and 20.
Launches	Nos. 2 and 3.
Tug	Ferrolano.
Dispatch boat	Giralda.
Aviation depot ship	Dedalo.
Armed launch	Cartagena.

NOTES ON TURKISH OCCUPATION OF SMYRNA.

12 September, 1922.

The Fourth regiment of the Turkish Cavalry entered Smyrna at 11.15 a. m., September 9, with Saleddine Bey in command. No disorder by the troops. The population is excited and there is some disorder in the suburbs. These troops were well dressed and under good discipline. On the 9th Gen. Naradine Pasha arrived in the city and took over command of the Turkish forces. A few hours prior to his arrival Murcelle Pasha, the new commanding officer of the Turkish forces, assured Capt. A. J. Hepburn, senior naval officer present, that he would use the troops at his disposal to the best advantage to keep order in the city. Notwithstanding the fact that the Greeks had left Smyrna intact, the surrounding country had been completely devastated. Some elements of the Turkish population of the reoccupied territory were infuriated and others panic-stricken, and all of them armed. From early appearances it would seem that the Turks are going to give a high-class demonstration of military occupation of the city of Smyrna. A proclamation by Mustapha Kemal was published in the newspapers of Smyrna on the 8th of September to the effect that summary execution of any Turkish soldier molesting noncombatants would be enforced. All requests made by Captain Hepburn on the Turkish general in command for troops to patrol certain areas in connection with American interests were immediately granted. Turkish troops have been sent to protect the refugees who are in the streets.

A guard of 64 American bluejackets has been landed for the protection of American lives against mobs. It is estimated that 150,000 refugees are at present in Smyrna. Foodstuffs are nearly exhausted and the situation will be very critical in a week's time.

In Mudania, the port for Brussa, there are 10,000 soldiers awaiting transportation and 25,000 refugees. Foodstuffs are nearly exhausted there. There is no disorder at present. The French landed

two companies without consulting their allied colleagues in Constantinople.

It is reported, but not confirmed, that the Turkish forces are now marching on Tchanak at the Straits. To-day, the 11th, the dragomen from the allied high commissions were sent to the Angora representative in Constantinople with instructions to request that the neutral zones be respected. It is also reported that notwithstanding the success of the Nationalists, the British have not changed their policy of the occupation of the Straits, and if necessary will place sufficient troops at the disposal of the commander of the forces in this zone to protect them. This information comes indirectly from the British high commissioner in Constantinople and is also published in local newspapers.

Information has been received, but not confirmed, that a wire has been received by the British commander in chief in Constantinople from the Turks that 24 officers of comparatively high rank who are English were taken prisoners by the Turks during the offensive. These officers had been serving with the Greek forces. A request was made for a ship to take them, as they did not want British subjects. The British commander in chief replied that his Government had no knowledge of any English officers fighting with the Greeks, hence to treat them as regular prisoners of war.

AT CONSTANTINOPLE.

Saturday and Sunday nights there was considerable demonstration, with minor disorders. There were several people killed by the mobs and a considerable number of windows broken in shops that were open. A large demonstration was made in front of the Greek general headquarters, but, considering the circumstances involved, the loss of lives and damage done was practically nil.

Monday night the demonstrations ceased, and the newspapers, especially the Turkish, criticized their subjects for having committed any foolish misdemeanors on the previous days, and as a result, last night there was no demonstration whatever. For the first time in thirteen centuries the mosques and minarets were lighted up and flags flown as a celebration of the Kemalist victory in Smyrna. This is unprecedented for the Turks, and none have ever known of this fashion of demonstrating their complete success in wars before.

To-day, the 12th, the refugees in Mudania have been estimated to have risen to the number of perhaps 40,000. All the Greek soldiers have either embarked on transports and left, or retreated westward toward Panderma. The Turkish troops entered Mudania on the 11th.

EUROPEAN EVENTS.

23 September, 1922.

(The following is a brief summary of events in Europe up to 23 September, 1922.)

Previous reports have pointed out the interdependence between the Near East situation and the question of German reparations, and it was indicated that French support to British policy in the Near East was contingent upon British support of French aims in central Europe. At the tripartite conference on the Near Eastern question held in Paris in March, 1922, the French Government acceded to all the essential British proposals in the evident hope of compensation in form of concessions on the part of Great Britain to the French program relative to Germany. As no concession was, however, forthcoming and as on the contrary British opposition to French continental aims became more pronounced culminating in the deadlock reached at the Genoa Conference, French support of the Turkish Nationalista in their attitude of intransigeance toward the proposals of the Paris Conference became more decided until a situation was created in the Near East which could only be settled by a decision of arms.

The outstanding feature of the European situation as it has developed during the past week is that for the first time since the termination of the World War an acute crisis in the reparations contest synchronized with an equally acute crisis in the Near East, and the opportunity was thus created for a settlement of the differences between Great Britain and France by mutual concessions on the part of the two powers in respect to Germany and the Near East.

It will be recalled that under the decision of the Reparations Commission of August 31, Germany was to give Belgium treasury notes due in six months under such provisions as to guarantee of payment as might be agreed upon between the Belgian and the German Governments. The guaranties offered by the German Government proved unacceptable to Belgium, and a situation was thus created in which, under the provisions of the treaty of Versailles, the Reparations Commission would be obliged to declare Germany in voluntary default unless a guarantor for the German notes could be found. A declaration of voluntary default would under the terms of the treaty give to France and Belgium freedom of action for the application of the sanctions which they demanded at the London Reparations Conference. At this juncture, however, the Bank of England intervened and gave to Germany the guaranties of payment demanded by Belgium.

The British action in thus preventing the application of sanctions against Germany appears definitely to establish the conclusion that in the British mind the Near East and the reparations questions can not be assimilated in a general understanding. The French reply to

the Balfour note on interallied debts has made it clear that no change in the reparations policy of the present French Government is to be expected. Recent developments have thus accentuated the state of deadlock that has heretofore prevailed in the opposition between French and British policies, and there is every prospect that this deadlock will continue until it is broken by the assumption of complete liberty of action by one or the other of the two powers, the intervention of a third power, or a change in the present alignment of the various continental States.

With regard to these several alternatives, it seems doubtful that either Great Britain or France is yet ready to assume complete liberty of action. Although threats of independent action in respect to the straits have been made by Great Britain, she can hardly resort to such procedure without creating a situation in which France could claim rights to similar action in respect to Germany. Independent action by Great Britain appears indeed to be excluded by her agreement to enter into a conference with the other powers concerned for the settlement of the Near Eastern question; if, however, the Turkish Nationalists should attempt to impose unacceptable demands such as the evacuation of Chanak and Ismid or the restoration of their rights in Thrace as conditions precedent to negotiations, the conference, like the peace conference proposed by Great Britain, France, and Italy in Paris last March, would not materialize, and Great Britain would again be faced with necessity of reaching a decision as to independent action. There is, of course, no basis for French independent action in the Near East and the issue of German reparations has for the time being been deprived of its critical character. France is, moreover, about to launch a new loan for the purpose of meeting a budgetary deficit of four million francs, and would be reluctant to creating any conditions adverse to financing her present fiscal needs. It is very possible, however, that while urging a Near Eastern conference, she may continue to support Turkish demands, thus forcing Great Britain to take independent action and thereby recovering her own liberty of action.

In respect to possible changes in the alignment of the continental powers, the present situation appears to offer a rather favorable basis for exploitation in this sense. This applies particularly to the Little Entente powers whom, as indicated in previous issues of this Summary, Great Britain endeavored to alienate from their evidently close understanding with France at the time of the Genoa Conference. It is now evident Great Britain is seeking to exploit this present situation in the same sense by playing upon the fear of these nations that the restoration of Turkey as a European power will imply Turkish support of Bulgaria and Hungary. Rivalry between Great Britain and France for the support of Yugoslavia and

Rumania has become manifest. Should Great Britain succeed in severing them from their French connections, she will have taken a long step toward the realization of her program of restoring the balance of power on the European Continent. It is, however, by no means certain that the fear of Turkey will constitute an adequate motive for these powers to break away from their French orientation. Turkey in control of the straits would occupy Russia's outlet to the Mediterranean and would consequently stand in greater danger from Russia than from any other power. Common fear of Russia might become the basis of a rapprochement between Turkey and Rumania. Yugoslavia, who is now said to be concentrating troops on her southern frontiers, is credited with aspirations for possession of the Greek Aegean port of Salonica and has thus interests capable of being adjusted in a compromise with Turkey. Yugoslavia is, moreover, in need of French support on account of the opposition of her Adriatic interests to those of Italy.

In regard to the possibility of a break up of the European deadlock through the intervention of a third power, there is considerable ground for the conclusion that the publicity given out from London is designed to affect the public opinion of the Western Hemisphere. To a far greater extent than those from any other source, London dispatches stress the extreme gravity of the situation and give out the impression that Europe stands upon the verge of another world war. A basis might thus be created for an American diplomatic intervention in the Near Eastern question which might ultimately extend beyond the scope of that question and embrace all outstanding European issues, particularly the reparations problem.

It is evident that Great Britain is making great efforts to make sure her hold on the straits by dispatching every available troop unit to the critical areas, Chanak and the Ismid Peninsula. At the same time, France has withdrawn her troops from the possibility of all hostile contact with the Turkish Nationalists. The possibility that as the result Great Britain may obtain permanent control over the straits is evidently causing the French considerable concern. If as the outcome of negotiations Constantinople and Thrace should be restored to Turkey while Great Britain retains control of the Dardanelles, Turkey would, to a considerable extent, become dependent on the British Fleet for the continued tenure of her European territory, and French influence in the Near East would undergo a serious diminution.

There are evidently many factors in the situation which require France to act with considerable circumspection. The uncertain attitude of the Little Entente and the possible though not probable military intervention of Russia require her to avoid committing herself too deeply in the present juncture.

Great Britain has evidently felt that the maintenance of the prestige throughout her Mohammedan possessions and spheres of influence imposed upon her the necessity for making a powerful demonstration of force. While, as is apparent from the proposals made by the Paris Conference last March, she is probably willing to concede most of the Turkish Nationalist demands by way of negotiation, yielding to such demands under the stress of military pressure would weaken British prestige throughout the Orient and the Near East. The general effect throughout Europe of this demonstration, involving the mobilization in Near Eastern waters of the greater part of British naval strength, has probably also been kept in view.

In the settlement of the Near Eastern question, Great Britain evidently aims at creating such conditions as will insure the unobstructed passage of the straits to the British fleet. Since the Gallipoli Peninsula at its narrowest point is only 5 miles wide and can therefore be securely held with a relatively small force, it is proposed to retain this area under the control of an Allied garrison. The passage of the straits is to be protected from interference from the Asiatic shores, which could not be held except by the employment of a large military force, by placing this littoral in a demilitarized status. For this reason the British have occupied Chanak and Ismid with a view to maintaining a foothold there until the Turkish Nationalists shall have consented to the demilitarization of the Asiatic side of the straits. It is doubtful, however, whether the holding of Chanak will insure free entry and exit of the straits, since there are other localities on the Asiatic side of the Dardanelles from which land action against the fleet is practicable.

In spite of the impression now being given general currency that Turkey and Russia are taking concerted measures for the restoration to Turkey of her former European possessions, it is probable that the greatest deterrent to a Turkish attack against the straits is constituted by the danger to which the Kemalist Government would be exposed from a Russian intervention. Due to her geographic location, Russia is more dangerous to Turkey than any other power. While Turkey may be willing to accept any support which Russia is willing to give her in the way of munitions and diplomatic and moral support, it is doubtful whether she would willingly accept assistance in the form of reinforcements which might in the last analysis result in her subordination to Moscow. It is significant that even during the most critical periods of the military situation in Asia Minor, when the Greeks were almost at the gates of Angora, theTurkish Nationalists did not receive any assistance from the readily available Russian troops in the Caucasus; nor is there any evidence that they sought such assistance. In the present situation, they are of course taking advantage of the increased weight which

the impression of Russo-Turkish unity gives to their claims. But it is doubtful that they are seeking Russian military support.

VALUES OF FOREIGN CURRENCIES.

Source: Federal Reserve Bank of New York.

30 September, 1922.

Country.	Monetary unit.	Noon buying rate for cable transfers in New York (value in U.S. dollars).
Europe:		
Austria	Krone	$0.000014
Belgium	Franc	.0711
Bulgaria	Lev	.006317
Czechoslovakia	Krone	.030817
Denmark	do	.2027
England	Pound sterling	4.3749
Finland	Markka	.021975
France	Franc	.0758
Germany	Reichsmark	.0006
Greece	Drachma	.0260
Holland	Guilder	.3873
Hungary	Krone	.000393
Italy	Lira	.0424
Yugoslavia	Krone	.003378
Norway	do	.1713
Poland	Mark	.000114
Portugal	Escudo	.0379
Rumania	Leu	.006119
Serbia	Dinar	.013486
Spain	Peseta	.1511
Sweden	Krona	.2631
Switzerland	Franc	.1865
Asia:		
China	Chefoo tael	.8000
Do	Hankow tael	.7933
Do	Shanghai tael	.7648
Do	Tientsin tael	.8050
Do	Hongkong dollar	.5702
Do	Mexican dollar	.5568
Do	Tientsin or Peiyang dollar	.5650
Do	Yuan dollar	.5633
India	Rupee	.2835
Japan	Yen	.4802
Singapore (S. S.)	Dollar	.5133
North America:		
Canada	do	1.000069
Cuba	Peso	.999375
Mexico	do	.4830
Newfoundland	Dollar	.997578
South America:		
Argentina	Peso (gold)	.8023
Brazil	Milreis	.1145
Uruguay	Peso	.7662
Chile	Peso (paper)	.1368

OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 11—1922.

15 NOVEMBER, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1922.

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 11—1922—15 NOVEMBER, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

Ill-considered and careless methods of collecting information serve not only to defeat the object of the effort but tend to build up suspicion which may deny information altogether. It is, of course, impracticable to give specific instructions on the conduct of the intelligence officer in collection of information. A certain initiative is of necessity left to him. It is hoped that he will not rush blindly in and by the freshness of his efforts or the absence of tact in handling this delicate matter offend the prospective source of his information.

O. N. I. will shortly issue to the service a digest of the present index sheet in which certain instruction will be attempted, but no set rules, in the nature of things, are possible.

Suggestions are requested for the improvement of this BULLETIN—such suggestions and criticisms are our sole criteria as to the usefulness of the BULLETIN.

Points especially to be noted in the collection of information are as follows:

(*a*) Do not fear to send in material which you may think is already on file. Your material is valuable for checking up.

(*b*) Place yourself in the position of a squadron commander in time of war and endeavor to get the information on a port which you think would be valuable to him.

(*c*) Study "Naval Reconnaissance" and learn to make a sketch map of a place *after your return to the ship.*

(*d*) Make personal friends amongst foreigners.

(*e*) Remember that only by enlisting the active cooperation and interest of every officer on board can your mission be carried out.

(*f*) Don't copy material from yearbooks. Padding reports is an unofficerlike procedure.

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Attention of the Service is particularly invited to the following articles which appear in this month's Bulletin:

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Just before going to press the following information was received:

The British Admiralty issued instructions on 19 October, 1922, for building two new dreadnoughts. It is rumored that these will be coal burners.

Mine-sweeping operations by German Navy under Versailles treaty have been completed. Mine-sweeping boats are being sold. Planes are being destroyed. All personnel in excess of 15,000 are being discharged.

The German Navy has at present in full commission 2 battleships, B class; 4 cruisers, Hamburg class; 5 destroyers; 6 type T141, 6 type G18, and 7 type T151. Six of last type are to be commissioned some time during the middle of the year 1923.

In addition to the above, there are 4 sound boats, 2 net lighters, 2 mine-laying ships, 2 torpedo-boat tenders, 4 F-36 type vessels, the gunboat "Panther" and the light cruiser "Berlin."

OPERATIONS FOLLOWING THE BATTLE OF JUTLAND.

Source: John L. Balderston.

1 July, 1922.

Admiral von Scheer, who might be called the German Beatty, a strong advocate of the offensive at sea, had succeeded the cautious Admiral von Pohl on January 18. After President Wilson's note about the *Sussex*, the Kaiser and his advisers decided to abandon their ruthless submarine policy, and on April 24 Scheer was instructed by his Government that thereafter his submarines were to obey prize law, visit and search their victims before destroying them. Scheer replied that he would not permit his U-boats to operate under such restrictions, and sent immediate wireless instructions to the commerce-raiding submarines under his command, which included all those not in the Mediterranean area, to return to the base. The submarines came back, and Scheer worked out a plan by which he hoped to lure the British fleet from its bases into U-boat traps. He decided to cross the North Sea toward England with the High Seas armada after the trap had been set. Twenty-two submarines were ordered to station themselves off British ports by May 23 and await developments. Two U-boats lay off Scapa and seven off the Firth, where Beatty's hated Cat Squadron and the Fifth Battle Squadron were. One submarine was off Cromarty, one off the Tyne, two off the Humber, one south of the Dogger Bank. With the Scapa submarines was a mine layer, the *U-75*, and she carried a full cargo. On May 29 she discharged her mines off the Orkneys; eight days later the *Hampshire* struck one of these mines and Lord Kitchener perished.

Scheer depended on his Zeppelins to give him warning of the approach of the Grand Fleet when he crossed the North Sea. But on the morning of May 30 the weather was misty, so Scheer altered his plan and steered north along the coast of Norway, thinking this safer. How the Grand Fleet came out and what followed off Jutland the world knows; the new fact of interest is that Scheer's strategic plan failed. He brought out his fleet hoping to bag some British warships with waiting submarines, and not one fell a victim. It is of interest, also, to discover that Admiral Jellicoe was mistaken in thinking that submarines were operating with the High Seas Fleet or in its rear. There were none there at all; all the submarines available had been concentrated off the British ports.

But Scheer was not discouraged by Jutland. He had been very lucky, he knew, but he had inflicted more loss than he suffered.

And he was greatly influenced by Admiral Jellicoe's turn away and by the evident British disinclination to face risks that could be avoided. After some controversy with Berlin, where Jutland had made the Government very nervous, he was permitted to plan a bolder repetition of Jutland for the month of August.

This Jutland that never was fought constitutes an operation of surpassing interest, and one that the public has never been told anything about. There were excellent reasons at the time on both sides for silence. Scheer revived his project, abandoned the first time because of mist, for a visit to the English coast. He thought that the lack of success of his submarines before Jutland was because they were then lying doggo in waters particularly well protected and in which danger was especially apprehended by the English. Accordingly, he planned to bring his fleet across to Sunderland, and Sunderland will be interested to learn that his battle orders included a bombardment of that city by almost the whole fighting strength of the German Navy, to be carried out if the British fleet did not arrive in time to prevent it.

The German admiral placed his submarines in lines stretched across tracks which he expected Jellicoe and Beatty to cross as they sped down the coast to intercept him. Six U-boats lay off Blyth, six more were stationed off the Yorkshire coast, and two lines of submarines off Terschelling, on the theory that the British fleet would chase the Germans home.

On the evening of August 16 the High Seas Fleet shaped course for Hartlepool. Scheer left the Second Squadron to guard the Bight. He had with him the new battleship *Bayern*, not finished when Jutland was fought, and the *Grosser Kurfürst* and *Markgraf* in place of the *Derfflinger* and *Seydlitz*, which had been too badly hammered to reappear. These ships went ahead with the battle cruisers. The dreadnoughts followed 20 miles behind, and eight Zeppelins hovered overhead. But the Admiralty was not caught napping; indeed, Jellicoe had come out even before the Germans sailed. At 5 o'clock the same afternoon the Grand Fleet started down the east coast. Moreover, the *E–23*, waiting in the middle of the North Sea on the German's course, torpedoed the *Westfalen* twice. Scheer sent his stricken ship home, and carried on.

During the night Beatty's Cat Squadron came out and was proceeding south 30 miles ahead of the Grand Fleet when, at 5.55 in the morning, the Second Light Cruiser Squadron, which led the van, ran into the first line of submarines off the Farne Islands. The *Nottingham* was torpedoed twice. News of this at once reached Jellicoe, who ordered the Grand Fleet to turn around and made north, away from the enemy. This maneuver might have been still more criticized than the Jutland turn away, but the Admiralty has

never told about it. Meanwhile the *Nottingham* was torpedoed again before she could get to port and sank. Tyrwhitt's Harwich flotilla was out, and sighted the enemy at 6.30 a. m., but could not attack unsupported. Scheer kept steadily on his course all the morning, fully informed by his Zeppelins of where the British squadrons were and what they were doing.

Some four hours after the loss of the *Nottingham*, Admiral Jellicoe decided to cover Newcastle. At noon he was 95 miles east of the Farne Islands, with Beatty ahead of him, steering SSE., and the German fleet 90 miles east of Whitby and still coming on. At 12.30 Beatty's squadrons were off Newcastle, 42 miles from the enemy, but here Scheer thought things were getting too hot, turned south, pushed off the Harwich "light stuff" that was hanging to his flank, and started home at 2.35 p. m.

Admiral Beatty was off in pursuit, but Jellicoe signaled him before 3 to turn back at 4 o'clock, because of submarine danger. At 3.20 p. m. the commander in chief, on receiving a report of a submarine, ordered Beatty to turn back immediately. While returning, an hour and a half later, the light cruiser *Falmouth* was sunk by *U–66*. Tyrwhitt kept after the Germans all the afternoon, and remained in touch, but could not do more unsupported. His orders from Jellicoe to make a night attack could not be carried out because of bad weather, and Scheer returned scatheless excepting for the damaged *Westfalen*. Nothing has ever been told the British public about this unfought Jutland, though communiques were issued announcing the loss of the two cruisers sunk.

Scheer was delighted with what he considered his successful day out, and planned another. But German policy had changed again; in October it was decided to resume unrestricted submarine warfare. Scheer's submarines accordingly had to be released for onslaughts upon merchant shipping. Without submarines, there seemed no purpose in risking the fleet again, since not even Scheer ever contemplated a general action unless forced into one, or unless the English attacked the Bight.

PROPOSED BRITISH NAVAL BASE.

17 August, 1922.

Several months ago a conference of British admirals (commanders of China, East Indies, and Australian stations) recommended that Singapore be made an important naval base. The recommendation included an initial expenditure of about £30,000,000. Due to the opposition of the Australians, nothing has yet been done to carry out the plan.

As Singapore is in a very strategic position in the Far East, the recommended base would be very advantageous to the British.

(21 August, 1922.—Since the receipt of the above information it has been learned that the British have awarded contracts for the erection of 31 fuel-oil tanks at Singapore, which will give a storage capacity of 3,600,000 gallons per tank. To date one tank has been completed.)

LOST TONNAGE IN 1921.

Source: Lloyd's Register.

23 August, 1922.

The statistics of vessels totally lost, broken up, and condemned have just been published by Lloyd's Register for the year 1921.

The table below gives the number, tonnage, and nationality of steam, motor, and sailing vessels totally lost during last year, as reported up to May 4, 1922. The tonnage given is gross for steam vessels and sailing vessels.

Country.	A		Lost.		B	
	Number.	Tons.	Number.	Tons.	Vessels.	Tonnage.
United Kingdom	9,034	19,571,554	74	72,104	0.82	0.37
British Dominions	2,399	2,499,244	82	58,687	3.42	2.36
United States of America [1]	4,958	14,697,088	72	107,145	1.45	.73
Denmark	798	964,464	13	8,386	1.63	.87
France	2,044	3,652,249	39	37,956	1.91	1.04
Germany	1,255	717,450	22	11,265	1.75	1.57
Greece	362	599,929	27	52,699	7.46	8.78
Holland	1,069	2,225,787	2	602	.19	.03
Italy	1,271	2,650,573	27	33,090	2.12	1.25
Japan [2]	2,033	3,354,806	29	51,185	1.43	1.53
Norway	1,889	2,584,058	27	46,829	1.43	1.81
Spain	828	1,165,541	35	55,560	4.23	4.77
Sweden	1,353	1,160,211	13	11,854	.96	1.02
Other countries	.....	.....	40	27,711	.....	.....
No flag	.....	.....	1	5,753	.....	.....

A Steam and sailing vessels owned according to Lloyd's Register Book, 1921–22.
B Percentage lost (steam and sailing vessels together).

[1] Excluding vessels trading on the Great Lakes of North America.
[2] Japanese sailing vessels are not inserted in Lloyd's Register and are therefore not included in these tables.

ROYAL AIR FORCE IN MESOPOTAMIA.

16 September, 1922.

On the 14 September, 1922, there were dispatched from Southampton 1,000 officers and men of the Royal Air Force for duty in Mesopotamia under the new organization commanded by Air Vice Marshal Sir John Salmond. The Air Ministry, under an arrangement with the Government, has taken over the entire military control of

this district, and this is one of the first steps toward augmenting the forces there.

In this connection, and pertinent to the United States naval attitude toward a separate air force, and to the contest which has been going on for the development of a separate air force, it is interesting to note that an official of the Air Ministry recently stated that the Air Ministry authorities were much worried over the responsibility of taking over full charge of this area, for, while they felt confident of handling small individual uprisings of natives, they did not feel that they could handle a general uprising through the merits of aviation alone. The original idea of the air force taking over this was based on a desire of the air authorities to "sell" aviation to the Government, and the success of the expedition against the Mad Mullah in Somaliland was used as a convincing argument.

BRITISH NAVAL SWIMMING TESTS.

19 September, 1922.

The tests for officers and men of the navy to qualify in swimming have been revised. There will be two tests, the first provisional, to be carried out in a swimming bath or in shallow water; and the second the standard test, to be carried out in the open sea. The provisional test is always to be carried out before the standard test is attempted. In each case, in order to pass the test, every man or boy is to swim 40 yards in a duck suit in deep water, after which he is to be able to keep himself afloat for three minutes.

NEW BRITISH FLYING BOAT.

25 September, 1922.

A new "hush, hush," five-seater flying boat, to be named the *Scylla*, is being constructed for the Air Ministry by the Supermarine Aviation Co., of Southampton, the constructors of the *Sea Lion*, the Napier boat which recently won the Schneider cup at Naples. The new craft has been designed solely for operation with the navy, and will be capable of use either as a reconnaissance machine or as a torpedo carrier. It will be fitted with two Condor engines and will be equipped with apparatus for the discharge of torpedoes at naval craft when flying at full speed. The new boat will also be well armed with machine guns. The hull will be in one piece from stem to stern, giving great resiliency and rendering it capable of riding at anchor when at sea. It will therefore not require a mother ship.

BRITISH BOMBING EXPERIMENTS.

Source: Reliable. **26 September, 1922.**

Recently bombing experiments took place with bombs anchored at fixed distances from the vessel. The coast-defense ship *Gorgon* was used. This vessel had previously been fitted with bulges. Two-thousand-pound bombs were exploded at a distance of 100 feet and 20 feet under water. Smaller bombs were exploded at shorter distances and 20 feet under water. The bulges withstood the shock, so that no damage was done to the hull, and it is the opinion of experts that the bulge will protect the hull against explosions from bombs under water. The machinery, especially the condensers, suffered badly from the water-hammer effect of the explosion. It is doubtful if the machinery of high-speed vessels will stand explosions from heavy charges 100 feet away. The smaller charges, at a less distance, when exploded at 20 feet below water, were more effective than the larger charges at 100 feet distance. It is believed that the large charges must be set off much deeper under water if the maximum effect is to be obtained from the explosion. In the near future a comparatively modern battleship will be used for further tests of this nature to determine definitely the effect on the machinery.

ALLOCATION OF ROYAL AIR FORCE PERSONNEL.

29 September, 1922.

The following statement of the allocation of the Royal Air Force personnel was issued by the Air Ministry on 18 September, 1922, as representing the latest information available:

	Officers.	Civilians.	Men.
Home:			
Inland area	1,268	2,231	11,251
Coastal area	392	52	3,049
Ireland	10	.....	106
Halton	108	45	3,102
Cranwell	[1] 187	94	2,134
Works and buildings	3	.....	127
Air Ministry	135	.....	5
Miscellaneous	16	.....	.....
Overseas:			
Rhine	15	.....	114
Mediterranean	50	.....	478
Egypt	206	771	2,312
Palestine	110		
Iraq [2]	264	374	3,005
India	220	815	1,706
Inter-Allied Aeronautical Commission of Control	7	.....	8
Miscellaneous	16	.....	.....
Total	3,007	4,382	27,397

[1] Includes 90 cadets. [2] These figures do not include 1,000 officers and men just sent out.

CROSS-CHANNEL AIRWAY.

6 October, 1922.

It is officially stated that traffic on the continental airways reached a record figure during the month of August. The numbers of machines flying to and from Croydon, the numbers of passengers traveling by air, and the weight of goods transported exceeded the highest totals hitherto recorded. As compared with July, when the passengers on all routes were 1,591, the August travelers increased by more than 1,000, the number using air services being 2,682. The previous best monthly figure was 2,021 in August of last year.

The British companies carried the largest proportion of this traffic, their share slightly exceeding 82 per cent of the whole, while the French and Dutch companies between them received only about 18 per cent. A year ago the British companies' proportion was just over 45 per cent, so that there is not merely an increase in numbers but also clear indications of the preference of air travelers for British-operated services. The number carried by British lines was 2,203.

There was a daily average of slightly more than 1 ton of newspapers from London to the Continent during the month.

Over 95 per cent of the flights by British airplanes on the London-Paris route were completed within the stipulated period of four hours, while practically 90 per cent of the flights were made in less than three hours. The percentage of useful passenger accommodation and general cargo space utilized during the month on British aircraft was 48 per cent, which is a slight increase on the proportion during July. There were no casualties or injuries to passengers or crews during the month.

On Sunday, October 1, 1922, the Instone Air Line inaugurated a daily service between London, Brussels, and Cologne.

CHILEAN OPINION AS TO JAPANESE-AMERICAN RELATIONS.

Source: Reliable.

6 October, 1922.

The interest of Chile and her neighbors in the foreign relationships and problems of the United States was, until quite recent years, merely that of the detached observer. The World War brought to South America the realization that there existed within the American continent a world power, and that from now on the international problems of the United States were to be matters of real concern to the South American nations.

2. The realization mentioned is not as yet a thoroughly common one, but it exists to a considerable extent among thinking people in Chile and, no doubt, among similar classes in other South American countries. The most outstanding example of this new point of view is the growing tendency to assume that there are certain questions facing America as a whole, and that the interest of the South American nations, especially those of the Pacific coast, is one with the interest of the United States. This thought that American solidarity of policy and action may some day be necessary for protection against a common exterior enemy is not only of interest as regards the future policies and international politics of the United States, but as regards similar policies and politics of the South American nations themselves. South America long ago ceased to fear or to predict the possibility of European menace; no Asiatic nation loomed up until comparatively recently as a Pacific power; and the net result was and is that the group of small republics south of Panama made themselves into an armed camp with no better excuse than the possibility and probability of their fighting among themselves for the settlement of such continental questions as their border disputes, their petty jealousies, and their racial antagonisms had managed to raise. It is, therefore, somewhat of a relief to find that their horizon has lifted a bit and that for the first time since the days of their struggles for independence they recognize a common exterior issue, threat, or menace, which they can unite to oppose. This menace, as they see it, is Japan; and one might also be tempted to say that were Japan as harmless as Siam she ought continually to be held up to South America as a standing threat. This would probably be near the truth as regards Japan and it would do South America no end of good.

3. The writer recently had occasion to visit a division headquarters of the Chilean Army. The affair was one of champagne and speeches, and the division commander, one of the ablest of Chilean general officers, took his hearers somewhat aback with the flat statement that the present world problem lay in the Pacific, that the threat from that source was a real threat, and that he confidently expected to see the day when the armies and navies of the United States and of Chile would stand together against a common enemy. The Chilean Army was long under German instructors; it is commonly counted a stronghold of pro-Germanism; its eyes were, prior to the World War, always directed toward Europe, especially toward Berlin, for its doctrine and its training, and toward Peru, Argentina, or Bolivia for its probable enemies. That one of its division commanders should state frankly his belief in the United States and should perceive an enemy across the Pacific rather than just over the Andes or north of the Atacama was a new experience.

Such opinions, if common, would not argue well for the continuance of German influence in Chilean military affairs nor for the accomplishment of what Japan has without doubt long tried to do—that is, to create in Mexico and in South America spheres of influence, intelligence centers, candidates for benevolent neutrality to serve her in future war as Spain served Germany in the recent one.

4. A prominent Chilean Army officer, generally held to be pro-German, recently expressed himself in substance as follows:

Chile has never had any strong love for the German. Years ago we went out into the world to get instructors for our army and navy and took what were by common consent then the best available—Germans for our army, Englishmen for our navy. Our choice has been vindicated. Our navy is excellent. Our army is the best in South America, and for this we may thank German discipline. Our people are undisciplined, stubborn, careless. They are good fighting material, but we may thank compulsory service and German instructors that our army is something more than an undisciplined collection of half-trained individuals. Along with German discipline and training we accepted—in fact, had to accept—German organization and doctrine. We were never particularly wedded to that organization and doctrine and we are far from being too stiffnecked and unprogressive, as we are too often accused of being, to depart from it now. Long before the German defeat there was a growing opinion in our army that we would do far better to adopt an organization and a combat doctrine more nearly related to the temperament of our people, the topography of our country, and the form of warfare we are most likely to face. We thought of French colonials, of the British—having in mind their South African and Indian experience, and of the Italians. Frankly, we never thought of the United States, but since the World War we have come to think very seriously of her. She has a fine body of professional officers. She came to the war late, took advantage of all its lessons, and has shown more ability than has any other military power to apply those lessons to an organization and a combat doctrine all her own. Her problems are, in an international sense, to be our problems or else clear-headed, thinking men are badly mistaken. Of course one must, from the viewpoint of the Chilean officer, discount the personal factor in this estimate, for I need not point out that the conception of our country as playing some part in world affairs—as being a participant in the great game for power now being played in the Pacific—gives our professional soldiers and sailors a much more extended horizon, a greater sense of importance, a more vital interest in creating a well-balanced and efficient war machine than would be the case were we to continue to have no field of interest and effort more extensive than the purely South American one. One must, therefore, distinguish realities from what may be, after all, not fact but the illusions created by professional pride and interest. The opinion has come to be well-founded, however, that we will be drawn into any future war in the Pacific and that our participation will be, of course, on the side of the United States. I might say that in all discussion along this line in our professional circles there is never any doubt of the coming of a war in the Pacific—that coming is always assumed; is a fixed premise—the discussion being not as to the probability of such a war but, rather, as to what part we will and should be prepared to play in it. I have said that we admire the military methods and doctrine of the United States, but we have hesitated and we hesitate now to attempt to apply the American system to our army for the simple reason that we are

afraid to tamper with our German idea of discipline. The situation is this: Our army is well disciplined and well trained; its methods may be a bit antiquated or somewhat unsuited, but it has a clear understanding of military essentials and we are always faced with the probability that by an attempt to introduce a new system we will end up with no system at all. Were it not for this we would call on the United States to come and take charge at once. And there is another consideration which we must take into account. We are afraid of America's mistaken idealism. Everyone, everywhere, can see a war with Japan coming—that is, everyone, seemingly, except those in charge of affairs in the country most concerned, the United States. It must be apparent to even an amateur strategist that the United States can not afford a defensive war against Japan and that the contest will be settled not on the mainland of either country but in the islands and on the mainland of Asia—that is, in China, Siberia, the Philippines, and, possibly, the Dutch islands. For the United States to wage an offensive war so far from home will require a strong navy and well-defended bases, and it is, consequently, somewhat difficult for us to stake our faith in the continuance of military efficiency in a country which showed so little ability to protect its own interests as the United States showed at the Washington conference where that country not only relinquished its sea power but did it of its own choosing, or rather, perhaps, of the choosing of its own politicians. If United States experts had any decisive voice at Washington, we saw no evidence of that fact in the outcome. To give another example, let me restate the well-known fact that Japan has never been unmindful of the tremendous and important part that Mexico, Central America, and South America could be made to play in a war with the United States. She has been very active in these countries and always with a view to making advantageous use of them in war. Has the United States the same interest? Where is her counteraction to all this? Has she a highly developed secret service, prepared in peace time and ready to function in war time? Is she estimating and preparing the part we may play in a war with Japan? In other words, to put it frankly, is the United States prepared to look facts in the face and give us a real leadership or would we find ourselves, after toying with her in military and naval affairs, left to shift for ourselves? Men capable of unbiased views long ago grew tired of England's habit of picturing Germany as an apparently docile beast which suddenly turned and bit the British lion. The only ones who could not see the English-German war coming for 20 years before it broke were those who were willfully and stupidly blind. Must we some day be forced to the same opinion concerning the United States and her relations to Japan?

5. A prominent Chilean journalist, one of the best-informed observers in South America, of proallied sentiments, recently expressed himself to the writer about as follows:

The sentiment for Pan American solidarity is undoubtedly growing and that the political effect of this sentiment should be paralleled by an effect on military and naval preparedness is logical and natural. The Argentine Government has recently brought great influence to bear to persuade Chile—not now in a very happy state financially—to build the Chilean section of a new trans-Andean railway. Previous discussions as to the military relations of Chile and Argentina have too generally been prompted by fear or conjecture as to future armed conflict between the two countries, and it must have come as a suprise that one of the chief arguments advanced by Argentina for the building of the new railway was the great gain that would result as concerns the ability

of Chile and Argentina, acting as allies, to defend themselves against a common enemy on the Pacific coast. We do not like Asiatics; we have never encouraged their coming to our country; and if they have made any inroads here it has been by secret means. We do not mean to serve either in peace or in war as an operations center for Japan. The United States is, of course, the main factor in all this problem and that country will make a mistake if she does not recognize and turn to her own benefit the decided desire for American solidarity now being developed in South America. The United States made an error in not inviting the Pacific nations of South America to the Washington conference. Such an invitation would have increased her prestige wonderfully. Chile, for instance, Ecuador, and Columbia have the power to play a much more important part in the contest for supremacy in the Pacific or in a Japanese-American war than have either France or Holland. The South American nations are not great individually, but collectively they are both great and powerful. In any war waged in the Pacific the United States will have ample need of our collective friendship and would suffer much from our collective neutrality.

6. The Japanese secret service is probably now as active in South America as it has ever been—and that is decidedly active—but it is believed that, on the whole, there has been a relinquishment of Japan's dream of building up commercial and political control in this section. Such hopes on her part undoubtedly existed at one time. The Chilean is deeply self-centered, none too responsive to foreigners of any kind, and none too trustworthy in his foreign relationships; but he far prefers the leadership of the United States to that of Japan, is beginning to realize that he may yet play some part in affairs exterior to South America, and has no intention of being made a pawn in Japan's game if he can prevent it. This statement refers to the Chilean in a broad and national sense—his race will always produce, as now, a supply of politicians, malcontents, and tricksters willing to deal with Japan or any other country willing to pay for their services.

CONDITIONS IN CHINA.

Source: Reliable.

9 September, 1922.

1. The following reports regarding the chaotic conditions of China from a political and military standpoint are of interest. In spite of the disturbing internal struggle, foreign lives have not been taken—in fact, the Chinese seem to make it a point to avoid harming foreigners. The Peking Government seems to have little authority outside of Peking, the Government is bankrupt, and the various Provinces are more or less run independently of the central Government, appropriating provincial funds for their own use. The really remarkable feature of the situation is that a country which has no real Government, and has not had one for several years, is not

plunged into complete anarchy. Chinese militarists and professional politicians have been tried and found more or less wanting. Sun Yat-sen is still in the French concession at Shanghai and reported to be engaged in various political intrigues. The premiership of China is still unsettled, Dr. Wang Chung-hin, the Acting Premier, holding until a permanent one is appointed. No one will take the office.

2. *Manchuria.*—Reports received is that Chang Tso-lin is concentrating all his energies upon preparation for another descent upon Peking in the near future with the ultimate hope of regaining his influence and position in Peking politics. He has engaged a number of foreign, chiefly Russian, instructors for his army. He has contracted for immense quantities of cement, winter clothing, and other supplies for his troops, and is in the market with cash offers for large quantities of arms and ammunition. The arms embargo, which ought to prevent him from getting these supplies, is notoriously ineffective in Manchuria. Provided he can pay the price asked, he can secure all the arms and munitions he wants over the Korean and Siberian borders.

3. Foreigners in Mukden speak highly of Chang Tso-lin's administration in Mukden and Shengking, and he apparently has lost little except "face" by his unsuccessful attack on Chihli this summer. He still has large quantities of rolling stock belonging to the Tientsin-Mukden Railroad (Tientsin-Shanhaikuan) branch, which he was supposed to return. It is not thought this reported attack of Chang Tso-lin on the Chihli forces will take place this autumn but probably in the summer of 1923.

4. *Hunan.*—The situation in Hunan is disturbing. Since the campaign for the election of a civil governor started the struggle among the different parties has been made intense. While the struggle is for the civil governorship, it is fully realized that whoever is appointed will control the military situation, the abolishing of the Tuchunates being a mere farce. The various military leaders have declared their intention of supporting their candidates by military force, which means that the election will be a bogus one, the dominant military figure compelling the people to accept his nominee. At the same time the antinorthern expedition under Gen. Li Lieh-chun has succeeded in forcing its way into southern Hunan. It is reported that he was enabled to do this owing to a number of the other military leaders inviting him to come to their assistance. He has occupied some 20 districts, and is now marching on Hengchow and Changsha. The people there are, on account of their fear of looting, making their way to Hankow. Gen. Chao Heng-ti (present military governor of Hunan) has dispatched

a force of men in the hope of preventing the occupation of Changsha, but his position is bad and he has applied to Gen. Wu Pei-fu and Tuchun Hsiao Yao-nan of Hupeh for assistance. The U. S. S. *Villalobos* is now at Changsha.

5. *Hupeh.*—Situation in Hupeh in the vicinity of Wuchang and Hankow remains unchanged. The Peking Government is unable to settle the appointment of a civil governor. Admiral Tang Hsiangming, the Peking appointee for civil governor of Hupeh, still remains in Hankow, while Gen. Hsiao Yao-nan (Wu Pei-fu adherent) retains the civil and military governorship and holds the seals. The troops of Gen. Hsiao Yao-nan are unpaid to the extent of about $3,000,000. The governor has demanded a loan from the Chinese banks, but it has been refused. The restlessness of the troops in and around Wuchang due to this nonpayment of salaries makes the military situation very unsettled. Gen. Hsiao Yao-nan sent northern troops to attach Szechuan because, due to civil war in Szechuan, the local authorities there have been unable to prevent the bandits on the Upper River from robbing river trade. This has caused the river trade of Hupeh to suffer. The U. S. S. *Quiros* and U. S. S. *Palos* are at Hankow.

6. In Ichang there is fear of looting on the part of the soldiers (Wu Pei-fu's troops). They have not been paid for six months. The U. S. S. *Eleano* and U. S. S. *Monocacy* are in Ichang.

RUSSIAN TAXES ON CHINESE IN MONGOLIA.

Chung Mei Service.

2 September, 1922.

The Chinese Foreign Office has received three communications dealing with the harsh condition under which the Chinese merchants are laboring in Mongolia due to Russian restriction. The first petition was addressed to the Waichiao Pu by the Wai Kwan, which is the society of Peking merchants who do business in Mongolia. They say:

> Since the occupation of Urga by the Russians, the Chinese merchants have practically lost everything that they had. Exorbitant taxes have been imposed by the Russians. They have levied a 20 per cent ad valorem tax on Chinese goods transported from Kalgan to Urga. Frequently this valuation is made according to their own whims, so that the amount of duty levied practically equals the actual value of the articles. They have imposed trade license taxes, sales taxes, land taxes, poll taxes on Chinese merchants, special assessments have been made for administrative purposes, and numerous other kinds of demands for money have been made on the Chinese by these Russians.

COMMUNISM IN CHINA.

2 September, 1922.

To the really adverse advertising—the truth about what communism has really done for Russia and to Russia—the average student or teacher in China has had scant access and no one has taken any particular pains to see that he should have liberal access to such information. The favorable advertising of communism in China has been patiently, consistently, and cleverly supplied by Russian agents in every town all up and down the China coast. While the intellectual class was groping for an "ism" Bolshevism was always within reach, theoretical and rosy hued Bolshevism, unalloyed by any counterpropaganda from a source which the self-respecting young intellectual had any reason to admire or respect.

POLITICAL CONDITIONS IN CUBA.

7 October, 1922.

After General Crowder's presence in Cuba for more than a year and a half as the special representative of the President of the United States, to advise concerning financial and political affairs threatening the stability of the Cuban Government, notable progress has been made during the past month toward the successful accomplishment of his mission. The necessity for radical reforms in the administration of public affairs has at last made itself felt in Congress, and in spite of a well-organized opposition, earnest consideration has been given to legislative measures tending to correct the existing evils. The purpose of these measures, five in number, may be summarized as follows:

(1) A bill providing for the modification of certain provisions of the civil-service law and the suspension of others, which will enable the executive to organize rapidly and effectively all the executive departments and particularly the service of collecting revenues and controlling expenditures.

(2) A bill providing for a better and stricter system of accounting.

(3) A bill creating a special commission for the investigation and precise definition of the Government's floating indebtedness.

(4) A bill rendering more effective certain portions of the judicial procedure and facilitating the removal of members of the judiciary.

(5) A bill evolved from and based upon the financial program recently proposed by the Secretary of the Treasury, Despaigne, providing for contracting a foreign loan for the settlement of the floating indebtedness and the initiation of public works, together with the creation of new taxes for the service of a loan.

The first three bills passed both houses, but because of certain modifications, which made them ineffective for the purposes sought,

the first two were vetoed by the President and returned to Congress for suggested changes; the third was approved. The measures relating to the judiciary and the loan have been passed by the House and are now in the Senate.

The latter bill, as approved by the House on September 28, provides for a foreign loan of $50,000,000 guaranteed mainly by a 1 per cent sales tax. Opposition to this bill took the form of a substitute bill, known as the Ferrara amendment, which sought to obviate the necessity for outside financial aid by various budget economics and special taxes effective for a period of two years, unless the amount of $50,000,000 should have been raised in a shorter period. This amendment was at first cordially received by the House inasmuch as it appealed to the Cuban sense of self-sufficiency, but its impracticability was soon apparent. Clause II of the Platt amendment requires that Cuba "shall not assume or contract any public debt to pay the interest upon which, and to make reasonable sinking-fund provision for the ultimate discharge of which, the ordinary revenues of the island, after defraying the current expenses of the Government, shall be inadequate," and General Crowder withheld approval of the Ferrara amendment because it was deemed impractical of accomplishment and ineffective for the restoration of economic confidence in Cuba.

All elements in Cuba are desirous of reestablishing the financial position of the island, but political affiliations and prejudice against appearing dependent upon the United States for a solution of their problems have caused undue delay in the accomplishment of that end. Propaganda against the American representative continues, although talk of impeaching President Zayas has subsided, at least temporarily.

AN OIL BLOCKADE WOULD CRIPPLE FRANCE IN A WEEK.

Source: Count de Fels in La Revue de Paris.

1 August, 1922.

(By Crowding France Out of the Black Sea Oil Fields (Treaty of San Remo), Did England Alienate French Interest and Cooperation in the Near East?)

[Condensed translation of the reference.]

1. Modern economic life rests upon fuel. To-day power and influence go hand in hand with control of oil. Henceforth the nation without oil will have no navy, no army, no credit, and will find itself classed with the minor countries like Portugal. Without oil there can be no such thing as real national independence.

2. The French public does not realize that the German offensive on the western front was temporarily eased up in 1915 so that Ger-

many might carry a stronger offensive into Galicia and Rumania in the search for oil; before all else the peace of Bucharest and the peace of Brest-Litowsk were The Peace of Oil.

3. The French public does not realize that the moment the eastern front was broken Germany had to lay down her arms for lack of oil for her many aircraft and army trucks.

4. It does not realize that at the most critical moment of the war, March, 1918, the shortage of oil on the part of the Allies almost resulted in the Germans breaking through the western front; and the greatest service rendered the allied cause by the United States, even greater than the United States Army, was their making available to that cause the 100,000 tons of tankers which were drawn from the Pacific.

5. The French public does not realize that for this inestimable service England has shown the United States ingratitude, and that this ingratitude has been in large measure responsible for America's policy of withdrawing from European affairs; that it has prompted the dissolution of interallied committees in which had been accomplished an economic and financial solidarity; that the curve of American sympathy for France follows closely the curve of French purchases of oil in America.

6. The French public does not realize that the treaty of Sévres was conceived with an eye solely to giving England control of oil fields in Turkey, pushing America to one side, while tricking France out of rights that should have been hers as succeeding to German rights.

7. The French public does not realize that by the strange and mysterious agreement of San Remo, 24 August, 1920, the French Government practically signed away our political independence, not only in abandoning to England the fields in Mesopotamia, but also all of our oil interests in the colonies and abroad.

8. It does not realize that England's disdain of the German peril, so disconcerting to us, is based on this very mastery of the oil situation which she has acquired. You can not carry on a war without oil; and without England's permission you can not replenish with oil. Thus in England's eyes there is no more fear of Germany.

9. The French public does not know that France has become a scene of conflict between the two great Anglo-Saxon oil trusts and that from this fact in particular we are letting ourselves be driven to making a choice as between America and England, with a good chance of losing the friendship of both.

10. The world moves and the oil kings lead. They both instigate and suppress revolutions in Asia, Mexico, and Central America, to suit their own interests. Speakers appeal to ideals and excite passions. They are but tools of the oil magnates. In their dealings

with Governments these latter meet power with power. They know how to control public opinion. During the war the flag of Henry Deterding, president of the Royal Dutch, was held in great respect by both sides until the Napoleon of oil definitely placed himself on the side of the English alliance.

11. We should look upon this cosmopolitan personage, almost denationalized as he is, as the head of a sort of super State of oil, as the personified control of an immense international force which has finally entered into combination with British imperialism.

12. From the point of view of oil, France was nonexistent in 1914. France did not foresee the future of oil. She had made no real provision for oil. Under the protection of a tax law of 1871 France's oil needs were supplied by a league of 10 importing companies, who were neither producers nor carriers and were hardly even refiners. Our oil fleet included 14 small ships, of which but three were under the French flag.

13. These 10 companies held a veritable monopoly of oil in France. They divided the territory among themselves and refrained from competition among themselves. Since the time when this league gained exclusive control of the French market, in 1893, it has been all but impossible for a competing company to get a foothold. Capital in the league is not more than 100 millions, while the profits on this investment amount to 50 millions annually. Thus oil costs more in France than in any other country in the world. Under a régime offering such large profits, and so perfectly assured, the beneficiaries of the system have no inducement to independent effort or enterprise. Since 1904 the league of the 10 companies holding the oil monopoly in France has been no more than a branch of the Standard Oil. No doubt some oil fields exist in France and in the colonies, but legislation as old as 1810 has settled all effort at prospecting. The rule of idleness, lack of interest, depression, absorption in internal quarrels, results in easy acceptance of things as they are.

14. Both America and England have faith in oil. They have but one thought—to push forward the time when oil will be the universal motor fuel.

15. By herself the United States consumes as much oil as does the rest of the world. At the rate they are going they will exhaust their own resources within a generation.

16. It is but natural that the two countries strive with all energy, speed, and capital to gain the premier place in oil. Imperialism passes from theory to fact.

17. Nothing can relieve the bitterness of the struggle between the two Anglo-Saxon competitors.

18. The form that the struggle will take is determined in advance by the differences in characteristics of the two peoples. And these differences have been shown up during the Great War.

19. Americans do not possess to the same degree as do the English the faculty of sticking to a line of action.

20. They lack a class of trained public servants brought up in a school of tradition. They are not so quick to discover the point of convergence beteween a matter of national interest and one of imperialistic power. From this difference their cause suffers.

21. In both countries there are powerful personages who come to the front without official authority or position and whom their Governments can disavow as necessary. Trusts are formed, group themselves about bankers and industrials, and combine in one big trust. This trust becomes the ally and associate of the public power (the Government). But it is never to be confused with it. The trust and the Government lend one another mutual help, but each reserves to itself sufficient autonomy, according to a formula which habit and ideas make it difficult for Frenchmen to understand.

22. Thus at the opening of hostilities the struggle was less between the United States and Great Britain than it was between the Standard Oil, under Mr. Bedford, and the Royal Dutch, which has a Bonaparte in Mr. Henry Deterding and a Talleyrand in Mr. Gulbenkian.

23. A few words are necessary as to these two trusts.

24. The alliance between Great Britain and the Royal Dutch Shell, including Mr. Deterding of the latter, was not an accomplished fact until 1918. Even though Mr. Deterding was favorable to the Allies and had foreseen their triumph, this Napoleon of oil did not fail to take all precautions. This is borne out when recording that alongside the Royal Dutch Shell and its associates in England we find two other oil trusts:

(A) The Anglo-Persian, which, directed by English and managed by trained specialists closely associated with the Admiralty, has taken for its special mission since 1909 the acquisition of the Persian fields. As we said in the previous article, "In 1922 the Anglo-Persian will be able to supply 80 per cent of the needs of England." Reaching beyond its original mission, it has established depots in all the large ports of Europe, including Spain and Hungary, and particularly in France. The imposing flotilla of monitors which England keeps on the Danube is for the protection of the Anglo-Persian.

(B) The British-controlled field, which, established under a Canadian law, takes for its special mission the evasion of the Monroe doctrine and completes the work of the Dutch Shell in Venezuela

and around Panama, encircling two-thirds of the Caribbean Sea and operating with success in Ecuador and even in Brazil.

25. The coming of the war precipitated events.

26. The United States and the Standard Oil generously provided 80 per cent of the needs of the Allies during the war.

27. And England finds herself incontestably in the lead in 1922. Ten years ago she had no oil within her own domain. To-day she holds half of the world's oil. In Mexico, where the immense resources would seem naturally to belong to the American system, England has, thanks to Pearson, now Lord Cowdray, thanks to a policy of handling the Mexicans, beaten out the Americans notwithstanding the small English capital invested. By similar audacity she is installed on American soil.

28. She has built a fleet of 252 tankers of 1,300,000 tons' capacity, compared with America's fleet of 191 tankers of 1,000,000 tons' capacity.

29. From this battle of giants England comes out the empire of oil. But the fight is not finished. The Standard Oil does not accept defeat. It has gained a foothold in France and more recently in northern Persia.

30. Whatever is to be the outcome, whatever the consequences at present impossible to predict, we can not refrain from expressing admiration for a policy where Great Britain shows herself to be once more an imperial race. The vigorous initiative of men like Lord Fisher, Lord Curzon, Sir Marcus Samuel, Sir John Cadman, Lord Strathconan, etc., has made up somewhat for the weakness of the British democracy. Perhaps the most striking feature of the fight for oil is this revelation of an extraconstitutional imperialism which governments by political parties had all but neglected. The man of affairs, the business man, is having his day. These uncrowned kings will not make a bad figure in history.

31. Why should France be denied the pride of possessing a similar class of men? Why has our League of Ten (oil companies) never had even the shadow of a thought of imperialism for France? It does not suffice to say that selfishness is the reason. Selfishness, self-interest, are human, not French alone; they are to be found among American, English, and Dutch business men. But while our compatriots are busy building up enormous private fortunes, men of affairs in other countries, especially in England, utilize the power of those fortunes in the interests of their Governments. Why? It it not that Frenchmen have less capacity for affairs, nor that our institutions are to blame any more than are those of other democracies. We come to the conclusion, then, that our failure is due to an idea of weakness transmitted to all classes of Frenchmen by those

who should be our leaders. The kernel of that idea is that France should efface herself in the interest of universal democracy. And while this Utopian thought is current, weakening the nation, those who accumulate large fortunes are concerned less with the nation's affairs.

32. Before the war France used annually 400,000 tons of oil furnished by the Standard through the League of Ten. To-day she needs 1,000,000 tons. It costs us 2,000,000,000 francs per year for this precious oil for our aviation and for our ever-increasing number of automobiles and trucks for civil and military purposes.

33. So absorbed were our leaders in pacifist ideas and in false principles of nationalities that they had no room in their heads for even a thought as to a national policy as to oil.

34. We gave up everything, abandoning all to England. Our weakness and our generosity passes understanding.

35. By the agreements of 1916, Mossoul was in our sphere of influence in Arabia. But we gave up to England our territorial rights. And when we later made claim to 50 per cent of the oil there turned up at once a phantom of a "Company of Straw Men," created in 1914 and known as the Turkish Petroleum, whose rights it seemed easy to prove as antedating ours. It may even be said that by the inexplicable convention of San Reno we were evicted from our own colonies. English prospectors are operating in Algeria and are installed in Madagascar.

36. If we accept the theory that political freedom depends upon freedom of oil supplies, we may then look upon the San Reno agreement as a sort of treaty of Methuen. By this latter treaty Lord Methuen in 1703 made Portugal a practical dependency of England since that date.

37. Being dependent upon the will of others in future as to oil supply, all the armies, aircraft, automobiles, tanks, trucks in the world will be to no purpose. A simple oil blockade, set up with the least noise or ostentation, would cripple us in a week. Our national resources are limited to 60,000 tons in Alsace.

38. It is astonishing that the debate in the Chamber should have lasted through endless sessions on the subject of the new military law and without a thought being expressed as to the bearing of oil on the matter of national defense. No one of the debaters presented the not untenable hypothesis: Suppose Germany and France, or any two countries, confronting one another within the inclosure of an oil blockade sustained by the Anglo-Saxons. The belligerents would be at once thrown back to methods of 1885. They have had to give thought to this in Germany; but we have not given it a thought. We organize our defense as though we had at hand oil for all time.

Where would we be if, lacking oil ourselves, Germany were to find a substitute, as she is no doubt bending every effort to do?

39. It remains for France to make a study of the possibility of developing a fuel from agricultural products that shall loose her from this bondage to the Anglo-Saxon oil trusts. We have a promising substitute already in use in the country, which is known as national fuel.

40. Up to the present it has been little more than an item for campaign speeches. Much has been said of the use made by Paris omnibus companies of a mixture of French industrial alcohol with benzol in 50–50 proportions; and the result has been modest.

41. At present industrial alcohol is under a State monopoly, and has been since a decree of 13 August, 1919. This Control buys of 167 distilleries, of which 144 are from beet root. The sale price is fixed by the Minister of Finances.

42. A differential price accomplishes the profit of the system. The Control sells at a loss alcohol for heat and light and for carburization. But it sells at great profit for exportation what is used for perfumery, for druggists, and for the vinegar industry. Under present conditions the business should continue to realize important profits. However, with warehouses filled with alcohol in stock, the Control is not putting it to best advantage in seeking markets or in seeking to develop the more general use of it. This French monopoly, even when it seeks to disguise itself as an industrial concern and to assume the airs of a trust, such as they are known among Anglo-Saxons, is doomed to failure in advance. What it needs is vigorous development as a producer of national fuel. If it can be rescued from the realm of politics we may find freedom from the domination of foreign trusts.

43. Against the general use of alcohol as a fuel in place of petroleum there are great objections which must be taken into consideration.

44. The heat units of alcohol are considerably less than of gasoline (4,600 calories of alcohol as against 7,500 of gasoline), a difference which is reflected in the price.

45. Alcohol used alone requires the motor of high compression and retarded admission. Thus it is not interchangeable with gasoline and can not be used in motors of ordinary type excepting by the admixture of benzol, ether, etc. Further, alcohol must be denaturized.

46. This difficulty would seem to be discouraging if we did not consider the agricultural advantages to be derived from the distillation of alcohol and the by-products of that distillation.

47. The secret of the agricultural success in Germany arises from her 10,000 small distilleries. all returning valuable by-products to

the soil, enriching it to a point where its productiveness has been increased threefold during the last 30 years, and even enabling a military resistance much longer sustained than would otherwise have been believed.

48. No more is necessary to show that the national fuel is at a point where patriotic interest (freedom from oil trusts) is coincident with rural interests (fields enriched) and social interests (lower cost of living).

49. Notwithstanding the inferiority of alcohol as compared with gasoline, then, there remains a large margin in favor of the former, so large that we should no longer hesitate. At the moment France produces 800,000 hectoliters of industrial alcohol. Let this be increased by 10 times, which is not at all impossible, and we shall be largely freed from the evil consequences of San Remo.

50. It would be Utopian to hope for the total substitution for gasoline. There is some point to be determined by circumstances where the importation of oil and the production of alcohol would balance.

51. The question of a national fuel thus links closely with a national policy as to oil, to be closely followed, else France, after her supreme effort in the Great War, will fall into the estate of a second-rate nation.

AIRCRAFT INDUSTRY IN FRANCE.

13 September, 1922.

On August 1, 1914, the French firms engaged in aeronautics were 94, 80 of which were situated within the Parisian district. Of these 94 firms 23 specialized in the manufacture of motors and 34 in that of airplanes.

In 1913 the exports of airplanes amounted to 132 tons, of which 48.5 were for Great Britain, representing a value of 10,062,400 francs. The exports of dirigible balloons amounted to 11 tons, representing a value of 928,000 francs; hydroplanes, 9 tons, of a value of 796,250 francs. There were no imports.

Since then the exports of airplanes and sea planes were as follows for the last three years:

	Tons.	Francs.
1918	174.5	1,381,000
1919	130.9	2,564,000
1920	141.2	1,911,000

Upon comparing these figures with those of the imports, 29 tons in 1920, it will be seen that France stands to a clear advantage and that foreign countries are showing more and more preference for machines of French manufacture.

Regarding spherical balloons and dirigibles, the exports are almost nil and the imports of little importance.

On the other hand, the aviation stock at the end of December, 1918, was 6,398 planes, of which 2,240 were pursuit planes and 1,920 observation planes, 17,765 motors, and 45,375 magnetos.

The total number of workmen employed in aircraft manufactures rose from 12,650 men as at January 1, 1915 to 186,003 at November 2, 1918.

The disproportion between the war output and possibilities for peace time obliged the majority of aircraft works to transform for other industries. The only opening for aviation motor works appears to be small or medium mechanical manufacture, viz, the autotruck or automobile industry.

FRENCH GLIDING PRIZE.

16 September, 1922.

M. Bleriot has offered a prize for the first French pilot who, leaving a point in France, flies to England or over English territory and returns to France on a gasoline consumption of not over 3 liters (about 5¼ pints).

CLEMENCEAU POLICY IN 1918.

Source: French press.

20 September, 1922.

An article appearing in the Matin has, according to the French press, exposed one of the most serious failures of the French policy in 1918. The following statement by Marshal Franchet d'Esperey concerning events in the Orient at the time of the armistice proves, the press claims, that M. Clemenceau forsook the national ends of France for foreign ends.

"In October, 1918," declared Marshal Franchet d'Esperey, "when on the Serbian-Bulgarian front the armies which I had the honor to command had accomplished a victory, I was confronted with two solutions—to march on to Constantinople or to march to Vienna and Berlin.

"If Russia had remained strong and had not broken the alliance, Constantinople would have been the objective. I would have established myself there firmly and quickly made contact with the Russian forces.

"But, since the Russian armies no longer existed, my duty was to follow the valley of the Danube, occupying Vienna, and march on to Berlin. This operation in close agreement with Foch's armies coming from the western front was logical and relatively easy. The

more so because I had under my orders two strong armies of equal strength—one French, the other English.

"At the moment when I made my decision with this in view and was about to march on to Vienna and Berlin, I received a brusque telegram from Monsieur Clemenceau, couched in almost coarse terms, enjoining me "to have an end in all personal initiative" and to turn over to the British general the command of British units, who, according to the agreement between Paris and London, was to assume the high interallied command at Constantinople.

"As a soldier, I could but obey, but it was an act without precedent and of incalculable consequences, for France thus relinquished to England for a long time to come the absolute control of Constantinople and of a great part of Turkey.

"History will judge this act and this relinquishment of our rights in the moment of full victory."

FRENCH MERCHANT MARINE.

22 September, 1922.

A decree revising the eight-hour-day law in the merchant marine was approved on September 14 by the Council of Ministers. The decree is made up of 13 articles. The second article fixes at 12 hours a day the maximum length of a working day on board ship. Article 3 provides that watches shall be arranged in such a manner that each seaman shall have eight hours of uninterrupted repose, exclusive of three hours for meals. Articles 4, 5, 6, and 7 concern the personnel and determine the equipment required on boats of each class. On board tugs, according to article 8, seamen shall not be required to be on hand more than 72 hours a week. The remaining articles are concerned with hours on fishing vessels.

By way of protest against the above decree, which seems sure of promulgation, the French seamen's association has called for a strike of 23 hours at all the ports. The departure of the French liner the *France* was held up a whole day owing to a general strike of the crew, including even the cooks and stewards, finally leaving Havre on the afternoon of the 14th.

THE BATTLESHIP FRANCE.

1 October, 1922.

1. M. Chappedelaine, chairman of the naval budget committee of the Chamber of Deputies, has given the following interview to the press after visiting the wreck of the *France* in company with Vice Admiral Schwerer and Rear Admiral Delzons:

2. The refloating of the *France* appears to be impracticable. The work of refloating would require at least two years' time, to which should be added

another three for repairing damages and refitting the ship. The expense would amount to some 80,000,000 francs, and there would be danger to divers involved, as, indeed, has already been experienced.

3. The *France* has settled some 40 centimeters in the mud. The ship is bottom up and rests with her weight on the turrets to such an extent that the deck and frames have buckled, causing structural damages of no small extent.

4. Salvage operations would have to be confined to the summer months because of a heavy southwest swell during the winter months.

5. At the end of five years we would have a ship 17 years old, whereas the useful age limit of such a vessel is but 20 years.

6. I am therefore opposed to refloating the *France*, first because of the expense and second because of her age and consequent small value to the navy by the time she could be again put in service.

7. Only Parliament can decide as to replacement by a new vessel.

FRENCH NAVAL AIRPLANES.

6 October, 1922.

The following is a list of airplanes possessed by the French Navy September 30, 1922:

Airplanes:	Number.
Hanriot 80-horsepower Rhone (for school use)	30
Hanriot 130-horsepower Clerget	12
Breguet 300-horsepower Renault	12
Nieuport 180-horsepower Rhone	6
Farman bimotor 500-horsepower (Salmson)[1]	2
Farman bimotor 450-horsepower (Lorraine)[2]	2
Total	64

FRENCH NAVAL SEAPLANES.

6 October, 1922.

The following is a list of seaplanes possessed by the French Navy September 30, 1922:

Seaplanes:	Number.
F. B. A. 130-horsepower Clerget with hull (for school use)	25
Hanriot 130-horsepower Clerget with floats (for school use)	24
Farman G. L. 300-horsepower Renault, with hull	100
Farman trimotor 1,000-horsepower (Sunbeam or Lorraine)	2
Latham trimotor 950-horsepower (Sunbeam)	6
Latham quadrimotor 1,000-horsepower (Salmson)[3]	2
Total	159

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[1] For torpedo-firing tests.

[2] From another reliable source it is known that at least two torpedo carriers, type Farman, have been delivered to the French Navy. These torpedo carriers are equipped with a 420-horsepower single-motor Renault and are called "L'avion Farman Torpilleur." It is also known that at least one other was building at the Farman works. These two torpedo carriers are probably being tested by the French Navy, and were thus not enumerated in the list given by the Central Service of Aeronautics.

[3] A Latham quadrimotor can carry one torpedo.

GERMAN MERCHANT MARINE.

Source: Lloyd's Register.

18 August, 1922.

The following statistics from Lloyd's Register concerning the German merchant marine are interesting:

	Gross register tons.
June 30, 1914	5,238,057
November, 1918	2,645,096
June 30, 1919	730,934
Jan. 1, 1920	419,000
June 30, 1921	652,000
June 30, 1922	1,783,000

According to these statistics, at the close of the war the German merchant marine was about half of its size at the commencement of the war. At the beginning of the year 1920 it had fallen to less than one-tenth of its pre-war size, owing to the deliveries of ships required under the terms of the treaty of Versailles. By the middle of the year 1921, however, it had increased over 50 per cent, and during the year June 30, 1921, to June 30, 1922, it increased over 170 per cent. While it is not expressly stated, these figures probably include only steam and motor vessels over 100 tons.

[These statistics furnish some indications of the rapidity with which the German merchant marine is increasing in size.]

GERMANS ACQUIRE CONTROL OF AIRPLANE PLANT IN ITALY.

6 September, 1922.

On account of restrictions applying to the building of aircraft in Germany, the Zeppelin Works, builders of Dornier metal airplanes, has acquired control of a plant in Pisa, Italy. The name of the Italian concern is Societa di Construzione Mechaniche Pisa. A portion of the former Dornier employees have been transferred to Pisa, where work on large metal airplanes is being carried out. One of the new designs is a twin-engined military airplane for the Spanish Government. Work on small airplanes permitted by regulations is being continued at the Dornier plant at Seemoos, near Friedrichshafen, Germany.

SCRAPPING OF EX-RUSSIAN WARSHIPS.

6 September, 1922.

According to a report to the Vossische Zeitung of Berlin under date of September 1, 1922, the ex-Russian warships *Admiral Makarow* and *Bajam* have just arrived at the harbor of Stettin, Germany, having been purchased by the German-Russian Metallverwertungsge-

sellschaft, and will be scrapped. The Russian crews are still on board the ships. The ships look quite dilapidated but nevertheless are quite imposing in general appearance. Each has four smoke-stacks. Further Russian warships are now en route to Germany for the same purpose.

RUSSIAN MILITARY ATTACHÉ IN BERLIN.

16 September, 1922.

A report from Moscow states that the Russian Soviet Government has requested the German Government to permit the appointment of a Russian military attaché at Berlin. This permission was accorded a few days ago. The post will be filled by a young general staff officer.

Hentzel in the Vampyr.

RECORD SOARING FLIGHT.

17 September, 1922.

The most successful German soaring flyer, F. H. Hentzel of Hanover, who made the world's record of 3 hours 10 minutes in a motorless soaring flight, gives the following picture of his record flight:

After the success of this year's Rhön soaring flight competition, the widest circles have begun to interest themselves in the problem of soaring flight. The birds, who move themselves in the air for a long time without flapping their wings, demonstrate that it is possible to hold one's self in the air without using power. This flying without wing flapping, the so-called soaring flight, is only

possible in moving air. The bird in some way or another must utilize the energy of the moving air. He can use the ascending air currents which occur through the irregular warming of the earth, the whirlwinds, or the upward winds which occur on the slopes of mountains, for flights without power. These upward winds on the mountains were used by us in the Rhön for flying without motors. The wind, which over level ground blows parallel to the horizon, is deflected upward as soon as it comes up against a mountain cliff. If one blows smoke against a book held obliquely, it will be seen that the smoke is deflected by the book and ascends far above the edge of the book. This cliff wind enables one to rise above the starting point. I myself in my flight reached an altitude of 360 meters above the starting point.

In order to effect such a flight with a motorless airplane, several preliminary requirements must first be fulfilled. The Hanover airplane represents a very

Hentzel taking-off in the Vampyr.

valuable and noteworthy construction, which is the result of the closest co-operation between science and industry. The Aeronautical Technical Investigation Institute of the Technical High School, Hanover, and the Hanover Wagon Factory have accomplished this result in combined work. In the following, I wish to describe one of my flights in order to make it clear how one flies with an airplane without motor power.

The airplane is brought to the starting position and placed against the wind. Then the starting cable is fastened on to the machine (a rubber cable which automatically releases itself after the airplane is in the air). The starting cable is hauled tight by six people, but when doing this the airplane is held fast in position by both ends of the wing and therefore can not yet leave the position. At the command "Start," all of the personnel, including those on the wing as well as those on the cable, run with the airplane against the wind. At the command "Let go," everyone releases his hold on the cable and wing and remains standing, the starting cable loosens itself from the machine, and the big bird floats noiselessly into the air. The

airplane immediately encounters the cliff wind and ascends. In my flights I have always flown in large flat "figure 8" form in order not to get too far away from the cliff and the effective ascending wind currents. As I gain altitude at the start, the spectators lie far below me. I fly over the starting

Above: Hentzel in flight. Below: Bottsch in the plane of the Darmstadt Flugvereinigung.

point. I hear the calls of the crowd. Otherwise all is quiet around me; only a light passing of the air on the wings can be heard. In my two-hour flight I flew in a very uniform wind. Consequently I did not have to pay much attention to the airplane; it remained quiet in the air. I could look around

undisturbed and enjoy the wonderful scenery at sunset. I thereby always flew here and there on the cliff edge of the Wasserkuppe. After an hour and a half the velocity of the wind decreased and I decided to fly out over the valley. On the way I flew over a small Rhön village, part of an old ruin, and then landed about 10 kilometers distant from the Wasserkuppe.

It was very different in my flight of 3 hours and 10 minutes. In this flight there was a strong, very squally wind of 12 to 16 meters per second. Immediately after the start the airplane was thrown about here and there, and I had to give my entire attention to flying the machine. Here, also, I flew on the flat figure 8, always close to the cliff edge of the Wasserkuppe. The Darmstadt machine started after I did and reached almost the same altitude as myself. At one time both airplanes stood entirely still with relation to the ground. We stood side by side in the air and could wave to one another. For about a quarter of an hour we held this same position. At this time and in this altitude the wind was perfectly steady, although very strong. The airplane lay entirely quiet in the wind and required no control movement to hold it in equilibrium.

Far below us stood the spectators, who had started a fire because of the cold wind. After a flight of three hours, and because of the darkness, I flew toward Gersfeld. I made several circles over the village and then landed above Gersfeld in complete darkness.

Comments.—It is believed that the character of the terrain and the meteorological conditions prevailing in the vicinity of the Wasserkuppe are in a large measure responsible for the brilliancy of this competition when compared with the Puit de Dome gliding flights in France but that this difference in conditions under which the flights were held by no means entirely accounts for the great difference in the records made.

Too much credit can not be given to the German pilots and constructors who have for the past three years intimately and scientifically studied the questions of gliding and soaring flight. Their application to the problem has placed them in a position not only to be able to choose a suitable location and to construct machines but has trained them to handle these machines in the air with the utmost skill. One well-known German aircraft designer after witnessing these flights informed a representative of this office that he had learned nothing from the results of this contest that he could practically apply at the present time.

WORLD'S LARGEST MOTOR SHIPS.

29 September, 1922.

The famous German yard of Deutsche Werft, Hamburg, has just received an interesting order, which means that this company is building the largest motor ships in the world. Furthermore, the yard holds the record for the amount of motor-ship tonnage built during the year. The German firm received from a Swedish shipping company an order for motor ships aggregating a tonnage of 54,000.

They will be fitted with Diesel motors of the system Burmeister and Wain. The Deutsche Werft possesses the license for these motors in Germany. Amongst others, this order includes two large ore cargo steamers each of 21,000 tons, having a length of 550 feet and a width of 70 feet, which are the largest cargo steamers so far built in Europe, and which, incidentally, on completion, will be the largest motor ships in existence. These steamers will be fitted with twin screws and will have a speed of 11 knots. The ships will be equipped with the latest appliances for the transport of ore, and are intended for traveling between Sparrows Point, U. S. A., and Chile. The owners of the ships will be a Swedish company, Messrs. Brostrom & Son, Gothenburg, which requires the ships for the execution of a contract they have closed with the Bethlehem Steel Corporation.

The Deutsche Werft has also, during the last few days, received from another Scandinavian shipping company an order for two motor ships, each 6,000 tons. The entire motor-ship tonnage which will be launched this year, and which is still in construction, is 13 boats, having a dead weight of not less than 118,000 tons, which beats the record of any other shipping wharf in the world.

GERMAN ARMY AND NAVY.

1 October, 1922.

(*a*) *Strength.*—The army allowed by the treaty of Versailles consists of 100,000, of whom 4,000 are officers. At the protocol of Spa there were allowed 200 veterinarians and 300 medical officers. Short service is guarded against.

(*b*) *Organization.*—The President is the commander in chief, and under him the defense forces (army and navy) are administered by the Minister of War. Over the army is a military officer, termed the chief of army administration. The force, consisting of seven infantry divisions and three cavalry divisions, is organized in two command groups, with the exception of one infantry division plus one regiment of cavalry, which form a separate group directly under the chief of army administration. The great general staff has been dissolved, but there is evidence that its functions are being carried on.

(*c*) *Equipment.*—The equipment of the forces is new, complete, adequate, and up to date. Reserve equipment is limited to necessary replacements and is specified. Manufacture is limited and the places of manufacture are designated. No tanks or aircraft are permitted.

(*d*) *Efficiency.*—Discipline and morale are good. Training is excellent. Service is voluntary, and compulsory service has been

abolished. Officers and noncommissioned officers are practically all veterans of the war. The privates are practically all young men between the ages of 18 to 23.

(*e*) *Reserve munitions.*—The amounts of munitions allowed are limited strictly to the needs of the force in carrying out its mission, which is to maintain order and control the frontiers. Manufacture is limited and places of manufacture designated.

(*f*) *Fixed fortifications.*—All fixed fortifications, except those deemed by the Allies as necessary to the accomplishment of the mission, have been destroyed. Those allowed to remain are specified together with their armaments.

(*g*) *Reserve forces.*—All reserve forces are prohibited. There is a decentralized police force of 150,000 men. It is estimated that there are 200,000 home guards, secretly armed and organized. In addition, it is estimated that there are 4,000,000 trained men of military age, veterans of the World War. Mobilization plans are not permitted.

NAVY.

(*a*) *Strength.*—The personnel is limited to 15,000, of whom 1,500 may be officers. The restrictions as to service are the same as in the army. The fleet consists of 8 predreadnaughts (2 in reserve), 8 light cruisers (2 in reserve), 16 destroyers (4 in reserve), 16 torpedo boats (4 in reserve). Submarines, aircraft, and mines are not permitted. The marine corps consists of 4, 818 noncommissioned officers and privates. They are primarily for coast artillery work and are commanded by regular naval officers included in the 1,500 above.

(*b*) *Organization.*—The navy is directly under the chief of naval administration, who is a naval officer. There is no prohibition of the naval staff in the treaty. The fleet is divided into the North Sea and the Baltic Forces, the North Sea Force being barely more than necessary for police duty. The marines garrison the allowed fortifications of the North Sea and the Baltic coasts.

(*c*) *Equipment.*—The equipment is modern, complete, and in good condition. Reserve equipment is very limited and manufacture is restricted.

(*d*) *Efficiency.*—Discipline, training, and morale are very good. The soviet system has been abolished. A system has been established whereby enlisted men may become officers. The present list of officers is made up largely by selections from the old list, based on a merit system.

(*e*) *Reserve munitions.*—Vessels in commission have their regular allowance of munitions. Vessels in reserve have none. There is a

small allowance for training purposes. Manufacture is limited and regulated. There are no reserve stocks on shore.

(*f*) *Bases and fortifications.*—There are no overseas bases. Heligoland has been destroyed; otherwise the naval bases exist as before the war, but with greatly reduced activity. The coast fortifications are prescribed and limited as to armament.

(*g*) *Reserve personnel.*—No reserve personnel is permitted. It is estimated that there are about 100,000 veterans of the World War who are available. About 25,000 of these are probably in the merchant marine, which will shortly absorb many more. The tonnage about trebled last year.

COMPLIANCE WITH THE TREATY.

As far as can be ascertained, the requirements of the treaty have been practically complied with at the present date. A small amount of material remains to be destroyed. A policy of evasion and concealment has been evidenced by the German Government and by individuals.

DEDUCTIONS.

(*a*) Germany can probably mobilize on short notice a land force of 450,000 men, well armed and equipped in accordance with prewar standard, but rather poorly supplied with munitions.

(*b*) A naval force of about 95,000 sailors and marines, 20,000 of whom are well armed and equipped, can be mobilized on short notice.

(*c*) The fleet is almost negligible except for purposes of training and patrol.

CONCLUSION.

Germany in her present state is incapable of a sudden offensive of any great moment.

DUTCH SUBMARINE DEPOT SHIP.

1 October, 1922.

Before a meeting of the Electio Technic Society of the Royal Institute of Engineers in Holland, Mr. W. F. Pott, engineer in chief of the Dutch Navy, read a paper giving a full description of the machinery of the submarine depot ship *Pelikaan*, just completed for service in the Dutch East Indies.

She is a vessel of 2,400 tons displacement, fitted with twin screws and driven by electric motors, the electric current being supplied by two dynamos coupled direct to Diesel oil engines. The switching arrangement enables running at reduced speed with only one oil engine running.

All auxiliaries are driven by electric motors, of which 65 have been installed throughout the ship.

The oil engines and practically all parts of the electric equipment have been made in Holland. The results of exhaustive trials were very satisfactory.

INTERALLIED DEBTS.

16 September, 1922.

1. An interesting contribution to the discussion on interallied debts appeared in the Corriere della Sera of recent date. This is one of the ablest and most influential dailies in Italy. Its foreign policy has always been sympathetic toward Great Britain.

INTERALLIED DEBTS.

By entering the war Italy defended her own existence as an independent State. Great Britain defended her Empire; on the Marne she defended India and South Africa. The United States defended themselves by fighting the Germans. The great merit of President Wilson, amidst a people happy in its own peaceful isolation, was to have recognized the dawning of a situation comparable to that of Canada in the eighteenth century. So long as Canada was French the 13 English colonies had felt the need of England's support. The enemy was at their backs and they were incapable of defending themselves. When Canada passed into English hands the 13 colonies felt they could dispense with the services of the English Army and gave the mother country her conge. The United States lived in placid content up to 1914. Mankind is proverbially blind to oncoming dangers. They would still be living in that same independent state if Wilson, with much verbal ideology, had not opened their eyes to the real danger besetting them. Victory was hanging on a mere thread. If Germany had emerged victorious Europe would have been at her beck and call. Sooner or later England would have lost India, Egypt, and South Africa. Spain was intensely Germanophil, the southern States of Brazil in the hands of a very powerful German group, and Turkey affiliated to Germany. The United States felt the approaching menace. What guarantee was there that Germany and Japan would not form an alliance, the latter still nursing secret enmity against the United States on account of the Californian question, and in the past had been accused of anti-American methods in Mexico. The war was also a case of life and death for the United States. This diminishes in no way our gratitude for the help given us, but we must mention this fact because it is the naked truth. It must be laid on the table again because America, now that the German menace has disappeared, has settled down once more into her former isolation and illudes herself that she intervened in Europe purely out of a spirit of chivalry toward the oppressed peoples.

On the other hand, England has not forgotten the peril, and in his note Balfour candidly recognizes that the war was fought in everybody's interest.

If the United States had not fallen back into this secular illusion of isolation from which (without wishing to prophesy evil) they may have a rude awakening, despite the limitation of naval armament, from a bright ray of the rising sun, they would hesitate before the error of a strict protectionist policy

to which the Republican Party is leading them—the final vote on the new customs tariffs. On the one hand, they claim the refunding of European debts; on the other hand, they establish prohibitive custom tariffs which bar all European goods entering the United States. Don't they see what a glaring contradiction this is?

Take Italy's case. Suppose Italy were in a position and had to pay interest on the 10,000,000,000 lire, gold, owing to the United States, she could pay in one of the two ways:

1. By the remittances usually made by Italian emigrants, which Italy could turn over to the United States.

2. By exporting Italian merchandise to the United States.

But the United States are blocking out Italian emigrants and are placing heavy duty on Italian goods. They request payment and destroy the means by which payment could be effected.

However, actual facts will demonstrate that the United States are not independent of Europe.

POLITICAL CONDITIONS IN JAPAN.

7 October, 1922.

The internal political situation in Japan is likely to show considerable change in the near future, owing to the fact that the Kokuminto Party, the third in power and the oldest and most democratic, has dissolved, the members being left to their own choice of the two leading parties with which they will affiliate. This step was taken in the hope that it would result in distinctly improving the standing and morale of the political parties in Japan.

According to the latest press reports, a near cabinet crisis has arisen because of the disclosure of the fact that the army in Siberia has been instrumental in the sale of arms and ammunition stored in Vladivostok to Chang Tso Lin. The Premier, backed by a large part of the cabinet, including the Minister of War and General Baron Tanaka, head of the Reservist Association and former Minister of War, are opposed to Marshal Uyehara, chief of the Japanese general staff. It is probable that the military council, to some extent, is back of the general staff and is the hidden force that enables this dual diplomacy and military domination to exist in disregard to the will of the foreign office. The retirement of Marshal Uyehara or even possibly a break-up of the cabinet is suggested. Premier Kato seems determined to back up the foreign office and to eliminate dual diplomacy in Japanese foreign affairs. The army authorities are themselves divided, the War Department proper supporting the Premier against the general staff.

JAPANESE DIRIGIBLE PURCHASED FROM FRANCE.

4 September, 1922.

The dirigible purchased from France by Japan is the Astrator type. Its dimensions are as follows:

Gas capacity	10,000 cubic meters.
Motors	Two 300-horsepower multicylinder.
Speed	60 knots per hour.
Guns	One 76-millimeter and several (?) machine guns.

Has wireless set and radio telephone set, arranged in an armored compartment.

JAPANESE SUBMARINES.

5 September, 1922.

According to the Japanese press, the Japanese submarine *No. 47*, which was constructed at the Mitsubishi dockyard at Kobe, was completed and turned over to the navy department on 25 August, 1922, and proceeded alone from Kobe to her home port at Yokosuka.

The Japanese submarine *No. 45*, which was constructed at the naval station at Sasebo, is now undergoing her acceptance tests (which so far are satisfactory) and will probably be turned over to the navy department within a few days. This submarine was built after careful study of submarine warfare as experienced during the World War and is built on the same principle of the German submarine *A–6*, which was brought to Japan from Europe. The next submarine to be completed is the *No. 62*. According to the press, it is the navy department's policy now to construct submarines of this type only.

LOSS OF JAPANESE CRUISER "NIITAKA."

4 September, 1922.

The Japanese coast-defense cruiser *Niitaka*, which foundered at about 6 a. m. on August 26, 1922, is lying on her side, partly above the surface of the water, about 4 miles north of Ocolonaya.

The survivors state that the *Niitaka* was at anchor at the mouth of a river when at about midnight a storm sprang up which rapidly grew in violence, causing high waves to come over the vessel and flood the engine and fire rooms. At about 5.30 a. m. a severe shock was felt as the vessel was grounded, and in about 30 minutes the vessel turned over and settled. Members of the crew who were able to jumped overboard and endeavored to swim ashore. Only one seaman was successful, and he, after succeeding in gaining shore, walked to Petropavlosk and informed the naval officials at that place of the accident. The destroyer *Maki* was sent to the scene and found the *Niitaka's* port side partly visible, and upon

closer examination found that some persons were entombed inside and still alive. Two holes were made through the side of the vessel into the engine room and 15 men were taken out; all were in good condition except one, who was seriously injured. All other members of the crew, including Capt. T. Koga and Commander S. Sono, were lost, there being only the 16 out of 311 officers and men saved.

The latest report states that about 20 bodies have been recovered, including those of Captain Koga and Lieutenant Murayama, chief navigator.

JAPANESE MEN-OF-WAR TO PATROL SIBERIAN COAST.

11 September, 1922.

According to the Japanese press, the Japanese Government has announced that Japanese war vessels will be kept in readiness off the Siberian coast after the withdrawal of the Japanese troops from Siberia to protect Japanese residents there in case of necessity.

JAPANESE PURCHASE ENGLISH AIRPLANES.

20 September, 1922.

The Japanese Navy has purchased a few heavy bombing planes in England that are due in Japan shortly. The number is not known, but it is though the planes purchased are to be used as models from which similar machines will be manufactured.

These planes are supposed to have an air endurance of eight hours at 90 miles per hour.

A number of combat planes have been ordered also. These are expected to arrive in about three months. Details of these planes are not known.

JAPANESE NAVAL POLICE.

20 September, 1922.

In the Japanese Navy there are no marines or gendarmes. However, for police duty at naval stations, fuel depots, and other naval shore establishments, a uniformed police force is used that is under the Minister of Marine. They are called "Shuye-i," which may be translated "naval police," but at some time may have been translated as "gendarmes."

The number in this force varies from time to time, but at present the number employed is 850. They have no police authority outside of naval reservations.

Police duty afloat is performed by enlisted seamen.

PROPOSED METHOD OF LIMITING JAPANESE ACTIVITIES.

Source: Lieut. Col. R. B. Bek.

1 October, 1922.

To blockade Japan by means of a powerful navy would not be an easy problem. The Sea of Japan could be easily closed to an enemy fleet. From Fusan to Simonaseki is a distance of 120 miles only, and the midway between the two coasts is guarded by the island of Tsushima. Saghalien, in the north, and the Hokkaido coast, in the south, are protecting the northern entrance to the Sea of Japan, the La Perouse Strait 40 miles wide entirely.

Powerful and numerous torpedo flotillas (submarines included), aerial forces, and mine fields are the most efficient means of Japanese defense and they were tested already during the maneuvers in 1919.

The only portion of Japan which could become an objective of an attack is the island of Formosa, which, thanks to its geographical position, remains exposed to the enemy's attack. So there would be no chance for any coalition to force Japan to abandon her ambitious intentions on the Asiatic continent by means of threatening her from the seas. It is only on the continent itself that Japanese militarism can be met. But in order to succeed in reckoning with Japanese militarism on land, Japan must be prevented from accomplishing her gigantic plan in southern waters or even properly preparing herself in order to carry this out even in remote future.

This, I think, could be easily attained even without bloodshed, without inhuman and useless blockades, which only inflict upon the peaceful population unnecessary sufferings. This could be attained simply and in a very short period of time by those great powers on which Japanese economic existence is depending to a great extent. Such a method has already been advocated by the "Hand-Off Russia" Society, which declared an international boycott of Japanese goods. If America, England, and other countries interested in world peace would accept such an appeal and would adopt the suggested method steadily and decisively against Japanese militarism, the game would be theirs.

I am sure that such a boycott of Japan by the whole world would be stronger than all the technical means of modern military art, the powerful fleets, and the numerous armies put together. No more raw material for Japan, no demand for her production, and only foods would not be restricted from being exported to the Japanese population, and I am sure that by means of such a boycott the Japanese people would force their militarists to lay down their arms and to demobilize their armies, thus settling the questions of Siberia and China.

Peace in the Far East can be established only by an international economic boycott of Japan.

JAPANESE BUY ROLLS-ROYCE ENGINES.

2 October, 1922.

The Rolls-Royce Co. are now turning out about 100 "Eagles" for the Japanese Government. About 60 per cent of these have already been completed. In this case the Japanese have no inspection force at the factory, but accept the engines after they have passed the regular Rolls-Royce two hours' endurance test, disassembly, cleaning, and then 15 minutes more straight running full out (both runs with a water brake).

JAPANESE BUYING MOTOR CYCLES.

10 October, 1922.

Information has been received from Portland, Oreg., as follows:

Considerable interest is being shown by several Japanese exporting firms in Portland in the purchase of secondhand motor cycles for Japan. The firms making the inquiries are invariably Japanese firms operating in America.

From one local concern, the Motorcycle & Supply Co., 60 Harley-Davidson machines were sent to Japan in 1920, 25 in 1921, and at present the exporters are negotiating for a shipment of at least 10 machines of the same make. All of the machines are secondhand.

The dealer said that the decline in number of machines sent out in 1921 was due to the higher cost of the models.

SECRET TREATY OF LITTLE ENTENTE AND POLAND.

19 September, 1922.

The Vossische Zeitung, in its evening edition of September 16, publishes the following article, which is of interest:

From a foreign diplomatic source the following text of a secret treaty has been given us, which was signed in Marienbad, Czechoslovakia, on August 31, 1922, as a result of a conference of the States of the Little Entente and Poland:

The President of the Czechoslovakian Republic, represented through his Minister President and his Foreign Minister; His Majesty the King of the Serbs, Croats, and Slovenes, represented through his Minister President; His Majesty the King of Rumania, represented through his Foreign Minister; the chief of state of the Polish Republic, represented by his Minister of Foreign Affairs, have concluded the following treaty:

1. The high contracting parties pledge themselves to defend in common the status quo in central and eastern Europe.

2. Every threat by one or more foreign powers against one or more of the high contracting parties will be considered a threat against all.

3. In case one or more of the high contracting parties feel required to intervene with a foreign power for the protection of their legitimate interests, they are pledged beforehand to inform the other allies in order to bring about an understanding with regard to the methods of a common action.

4. Every legitimate complaint which one or more of the high contracting parties brings before a foreign power will, after prior agreement, be supported by all the allies.

5. The high contracting parties pledge themselves in case of war to mutually assist each other with all their forces.

6. The high contracting parties will immediately bring their general staffs together in order to study the common means which seem best fitted to assist in executing the above pledges.

7. This treaty will not be published.

Prepared in four copies at Marienbad on August 31, 1922.

(Signed) E. Benes.
Nik. P. Pasic.
Duca.
Narutovicz.

MILITARY IMPORTANCE OF POLAND.

Source: Reliable.

1 October, 1922.

Events since the close of the World War have made of Poland a power of military importance.

The Polish Army is the main bulwark between Germany and Russia. The attitude of the Allies—that of France in particular—is to assist Poland in every possible way in order that her army may carry out this part.

In such assistance lies Poland's hopes of her own integrity.

Since the rebirth of the nation her army has successfully terminated a war against the Russian Bolsheviki and has passed the ordeal of demobilizing and reorganizing.

Her present military situation is much as we might expect to find it in a state so recently organized and which has been almost continually at war.

She has a large number of trained soldiers, considerable left-over war material, her war plans and mobilization plans are not fully worked out, and she is financially bankrupt. The only difference from what we might expect is that she is not war weary, but seems ready to fight whenever occasion offers.

At present, of 2,000,000 men available for active service, she could arm and equip 1,000,000, but could not sustain them in war unless she is furnished munitions from outside sources.

In any European war Poland, acting alone or as an ally, would be formidable in direct proportion to the munitions she could secure from outside sources.

Poland's attitude toward the United States in any war to which we would seem liable would probably be friendly.

Regardless of what her attitude might be, it would have no direct bearing in a military sense. It might affect to some extent the willingness of our Polish population.

THE SOVIET NAVY.

14 September, 1922.

ORGANIZATION.

The Russian naval organization is now as follows: Under Trotski are so-called commissars for the navy, who are responsible to Trotski as head of the War Ministry for the maintenance of the Navy. Under these are the Russian naval staff, consisting of former officers of the Imperial Russian Navy. In this naval staff are three admirals—one charged with the command of the Baltic, one for the Black Sea, and one for Archangel. The naval staff functions in all respects as a miniature Navy Department and is being rapidly increased, as it appears to be Trotski's aim at the present time to put the Russian fleet on a working basis and at least to make it available for the defense of Petrograd. The real motives for the repair and building up of the Black Sea Fleet are not apparent.

ORGANIZATION OF THE BALTIC FLEET.

My informant inspected the vessels of the Baltic Fleet and found four of the first-class battleships of the *Gangut* type in a fair state of preservation, although it was evident that repairs were still necessary. The armament is in good condition and there exists in Russia at the present time a large number of large-calibered guns which can be used as replacement for the guns now in the battleship turrets. The repairs to the machinery constitute the most serious drawback to the efficiency of the fleet, and the Russians are in most cases not capable of effecting these repairs and can only put the machinery in shape so long as spare parts from the previous naval supplies are on hand. The Russians desire urgently to purchase the lacking machinery parts, such as electrical motors, fire-control gears, and machinery parts, from the Germans, but are not prepared to pay cash down for this purpose. The German firms refuse to extend credit and the problem devolves on the naval staff to obtain money for the repairs to the fleet in other ways, such as, for example, by the sale of obsolete ships for scrap. The light cruisers of the *Nowik* class were in fair state of repair and were engaged in maneuvers off Kronstadt. The destroyers and submarines appeared to be in the best state of preservation.

The naval staff intends to organize the effective Russian Baltic Fleet as follows, namely: Four battleships of the *Gangut* class, eight light cruisers of the *Nowik* class, 12 submarines, 16 destroyers.

These forces are destined primarily for the defense of Petrograd. My informant suggested that the maneuvers off Kronstadt were in the nature of a display for the visiting Germans and were done with the purpose of impressing the outside world with their efficiency.

EQUIPMENT.

My informant stated that in all branches of the naval warfare the Russians were most efficient in mines. The stock on hand in their supply depots is somewhat over 10,000 mines (estimated) of the double-mine type. (This type has been further developed by the Germans.) This is the type which permits one mine to be held in its position below the surface of the water while the other mine remains on the bottom with the anchor. In deep water the lower mine remains held at 50 fathoms below the water level. In the event that the upper mine is swept the lower mine then rises to the position occupied by the first mine. It was stated that the Russians were well enough equipped with mines to be able to place formidable and dangerous mine fields near Petersburg, as they had 24 mine-laying vessels with a large number of mine sweepers. Coal is very scarce for the Russian fleet, and Russia has attempted to purchase coal in Germany—this also on credit—but they were refused by the Germans. Large supplies of ammunition are still on hand as reserve supply of ammunition, for the Imperial Russian Navy was not blown up during the revolution and still remains stored in a good state of preservation.

PERSONNEL.

The Russians have gone a long way toward reestablishing discipline in the navy. The officers hold only temporary commissions, which automatically expire when the officer is relieved from his assignment. In other words, the commanding officer of a battleship with a temporary rank of captain reverts immediately to the grade of seaman upon being relieved of his command. A number of the officers in the Russian Navy at the present time are those who served in the revolution, together with the number who have been promoted to a commissioned rank from the enlisted personnel. Most of these officers obtained their rank on account of their leadership during the revolution and during the mutiny in the Imperial Russian Navy. It later became evident that these officers needed special training, and for this purpose a school was established where such officers are given the training in the branch for which they are attempting to qualify.

New officer material is selected from the enlisted personnel, and as time goes on the material selected for training is more and more carefully picked over, as even the communists are beginning to realize the necessity for the training of commissioned personnel. A few of the officers in the Russian Soviet Navy were formerly officers of the Imperial Naval Reserve who served aboard Russian merchant vessels. The admiral commanding the Baltic Fleet is a former lieutenant of the Imperial Russian Navy.

DISCIPLINE.

It is understood that Trotski is doing everything in his power to build up the discipline of the Russian Navy. The commissars who are stationed aboard the naval vessels have no authority in any way to interfere with the commanding officers except in the supervision of political activities. It is stated that even the communists are beginning to realize the necessity for a well-disciplined personnel, and under such conditions they practically cease to be communists. The crews are drilled and exercised regularly. Disobedience of orders is promptly and severly punished, while every effort was being put forward at the present time to bring the personnel to a high state of efficiency. All of this, of course, has not yet been accomplished, but owing to constant pressure from Trotski the organization appears to be rapidly improving. The ships were not clean and the men were generally dirty. This state of affairs militates against the efficiency and may in time gradually be improved. Officers and men are both given a ration consisting of cabbage and black bread. The pay of the officers is practically nothing and the majority of them are serving simply in order to keep alive. As exemplifying the condition of affairs, my informant stated that he was received aboard with full honors, that the bands were paraded, and he was escorted with every attention to the admiral's cabin. In the cabin the admiral had small, uncomfortable, and dirty quarters. One oil lantern hung overhead in the cabin, the admiral apologizing for this state of affairs by remarking that one of their generators was not in working order, and that therefore they were somewhat restricted as to light. The food served aboard, even in the admiral's cabin, was hardly fit to eat and all of the mess gear was in a disgusting state of filth.

UNIFORMS AND INSIGNIA.

Officers and men wear the same uniforms with the exception of the distinguishing marks. These uniforms consisted of a blouse similar to the old blue service uniform of the United States Navy. Officers are distinguished by the same equivalent straps on the sleeves, which, however, are of red cloth instead of gold. My informant states that at the present time there is a tendency for the officers to line the red stripes with a thin gold braid. Petty officers wear the distinguishing chevrons on the sleeves as authorized in the Imperial Navy. The crews of the vessels inspected by my informant appeared in what were apparently brand-new uniforms, which had a distinctly English cut. It is not known how or where these uniforms were obtained for the Russian Navy. At the present time the tendency is noticeable for the former officers of the Im-

perial Navy who are now holding temporary commissions under the soviets to appear in their old uniforms with the brass buttons of the Imperial Navy. It is stated that this would have been impossible some months ago, but it is taken to indicate the growing tendency of the naval staff to reestablish permanent commissions in the navy and to build up a corps of trained, professional naval officers.

ENSIGNS AND FLAGS.

It is worthy of note that the Imperial Russian Ensign is flown from the jack staff while the red flag of the soviets flies from the regular flagstaff. The commission pennants and admiral flags are the same as for the former Imperial Russian Navy.

GENERAL.

The Russian vessels as a whole have presented the appearance of being in much better state of repair than would be expected as a result of their long disuse. They lack paint, coal, machinery parts of all kinds, oil, and in general practically all of those supplies which are necessary to keep the fleet in an efficient condition. The Russian naval staff is attempting to raise money for the purchase of these supplies and hopes to obtain sufficient money from the sale of old ships' scrap to recondition sufficient ships to carry out the program outlined above. This has not been possible to date, as the Russians are unable to obtain credit. The Russians made every effort to obtain this credit from the Germans and even suggested to my informant that the Russian men-of-war be reconditioned and supplied with full equipment in German harbors. This request was, of course, refused, as it would have been a deliberate violation of the treaty of Versailles and would have involved unpleasant consequences for Germany. The Russians then attempted to obtain paint and other supplies from private concerns in Germany but failed in this as no cash payments could be arranged. My informant believes that the Russians will not be able to carry out fully the rehabilitation program which the naval staff is embarkking on, as it will be impossible for them to raise sufficient money to begin to cover operating expenses. The best they can possibly do might be to equip and operate two vessels, keeping them in full commission while the balance of the fleet of capital ships is held in commission in reserve, ready for operations on three days' notice. An attempt to hold maneuvers off Kronstadt was made during the presence of the Germans in Russia and the fleet was maneuvered remarkably well under the circumstances. It was learned later that one of the cruisers grounded during the course of subsequent maneuvers and was rather badly damaged.

In general, my informant states that there is a decided amount of increased activity at the present time, which appears to be largely due to Trotski's personal ambition to build up a navy for national defense. He thought that if for any reason the initiative on the part of Trotski should fail, the whole scheme would collapse and the Russian Navy revert to its former chaotic state. The present tendency is, however, to improve the discipline, repair the vessels, and build up a corps of professional naval officers; in other words, to put the navy on its feet again. How far they have progressed along this line can be judged from the statement of my informant that while the Russian Navy did not have the equipment or the discipline of the German Navy at the present time, still they were in most respects better than some of the third or fourth rate small navies existing to-day. The fact that Russia possesses 12 submarines which were in reasonably good state of repair made it necessary for Germany to watch the development of the Russian Navy with the greatest care. It is understood from other sources that Russia will probably arrange to scrap about 30 vessels, all told, in German yards and to use this money so obtained for the purpose of rehabilitating the fleet. It may be stated in general, however, that the fate of the Russian Navy is intimately bound up with the economic condition of the country.

PAY OF SOVIET NAVY.

16 September, 1922.

The crew receive 300,000 rubles (20 marks, or about 1¼ cents) per month, and free rations.

The rations consist of the following:

Daily—1 pound of black bread.

Per fortnight—1,200 grams of flour, 220 grams of sugar, 220 grams of salt, 230 grams of linseed oil, 25 grams of tea, 500 grams of tobacco, 3 boxes of matches, 115 grams of soap, 1,500 grams of herrings, 200 grams of dried vegetables.

At sea the daily ration amounts to 2½ pounds and the fortnightly "Pajok" is 25–30 per cent higher.

Grade one (sergeant and seaman receive 2,000,000 rubles (130 marks); grade two (file leader, vice sergeant,) 3,000,000 rubles (200 marks); grade three (captain, lieutenant), 6,000,000 rubles (400 marks); grade four (major, lieutenant commander), 9,000,000 rubles (600 marks); grade five (commander, captain), 13,500,000 rubles (800 marks); grade six (commander of large battleship, naval commander at Petersburg), 16,000,000 rubles (1,100 marks); grade seven (flag captain, commander of the naval forces at Moscow), 32,000,000 rubles (1,400 marks=$1.) The officers on staff duty receive 200 per cent more.

PROPOSED SOVIET AIR FLEET.

16 September, 1922.

The Iswestija, of Moscow, suggests the formation of a large Russian "civil air fleet," without which it is impossible to organize a military air fleet. This proposed "civil air fleet" must secure the confidence of all classes of the people and will represent a powerful cultural factor in the life of the nation. In the event of a war, the Russian flyers would then be able to turn the fruit of their experiences to the service of the nation as it is confidently felt that in the next war that nation will be the victor which holds the supremacy in the air.

OPINIONS ON PRESENT RUSSIAN GOVERNMENT.

15 September, 1922.

In considering the opinion held by the people in regard to the present Government of Russia and its future the diversity of views is most marked. In coming to an understanding of this point I am giving herewith the opinions and conclusions drawn by five different men of different circumstances, and although they each differ in some particulars, yet in others there is a marked unanimity of thought.

(A) A Russian army officer: This officer believes, as an assumption which does not require proof, that the power of the Government in Russia to-day rests upon the power of the army. In the morale and patriotism of the army he has little faith, considering it purely a question of being able to feed the military forces; and if the Government fails in this, he is sure it will collapse. But he thinks that the ultimate failure will come in a different channel and this he expects this winter. Lenin has been able partly by power, partly by diplomacy, to hold the central Government together. But with the death of Lenin, he says, the guiding inspiration will be removed. He then expects a collapse because of the ensuing struggle for power of the three great parties and party chiefs. He still has a belief in the efficiency of exterior counter-revolutionary movement, provided that movement is backed by some powerful country.

(B) Former rear admiral in the Russian Navy: This officer thinks that the Government is becoming weaker every hour and that it is certain to crash soon. But he stresses the point that the downfall will come from economic causes only. He thinks that in one respect a war might save them as it would act as a stimulant, but in a greater sense it would be catastrophic, as the Government could not support a war. He has little belief in the possibility or the desirability of a military action directed against the Government from a foreign country. He thinks that the Government has become much more reasonable, but that this had to be, and its inertia will

ATLANTIC OCEAN
ARCTIC OCEAN
NORWAY
SWEDEN
FINLAND
KARELIA
Archangel
ZYRIAN
SIBERIA
SOVIET RUSSIA
BALTIC SEA
Reval
ESTHO.
Petersburg
Rigd
LATVIA
VOTIAK
MARI
TARTAR
BASHKIR
Danzig
Moscow
Warsaw
POLAND
WHITE RUSSIA
Samara
Saratov
Kiev
CZECHOSLOV.
HUNG.
UKRAINE
RUMANIA
KALMYK
KIRGIZ
CRIMEA
CASPIAN SEA
BULGARIA
BLACK SEA
GREECE
Bosporus
GEORGIA
CONSTANTINOPLE
AZERBEIJAN
ARMENIA
AEGEAN SEA
DARDANELLES
TURKEY
Angora
TURKESTAN
PERSIA
EUROPEAN AND ASIATIC RUSSIA
Moscow
CHINESE REPUBLIC
Kirgiz
Chita
Mongolia
Tashkend
Vladiv-ostok
RUSSIAN SOVIET REPUBLIC.
① MOUNTAIN
② KABARDIN
③ CHERKESS
④ ABKHAZIA
⑤ DAGHESTAN
⑥ CHUVASH
⑦ GERMAN VOLGA COMMUNE
⑧ KHIVA
⑨ BOKHARA

carry it to its downfall. Of course, he says, the Government is unpopular everywhere with all but a few of the people.

(C) A doctor of medicine in the city of Odessa: This gentleman possesses a very wide and liberal education, has studied and traveled abroad, and is very liberal in his political views.

The doctor takes a very matter-of-fact attitude toward the Government. He describes it as being in the logical course of recovery from a disease and is very optimistic toward it. He thinks that the process from now on will be one of rapid evolution with a constant bettering of conditions. To prove this he points to the difference in the Government in the last 12 months. He says that the man in the street considers the present Government as a joking matter, and although dissatisfied with it, he endures it because of its constant changing. He thinks the idea of a change in the Government due to counter-revolutionary activities is preposterous. He emphasizes the point that the Russian exiles have grown quite apart from the contemporary Russian life and that for all intents and purposes they are quite dead. He says that he can not help but marvel at the pertinancy of the Government—itself so weak and yet apparently so fearless. As an example of this, he says that potentially the Government is as weak as China. Yet in China a foreigner is quite unmolested as far as the Government is concerned, while in Russia the Government would not hesitate to arrest or imprison any foreigner exactly as it would one of its own nationals. He believes that the Government has undoubtedly been made considerably stronger this summer due to the good harvest. He believes that the foreign powers should recognize the present Government de jure; that this would lead to a more stable condition, living would improve, and the Government would evolve into a strong republic or a constitutional monarchy.

(D) The foreman of a gang of laborers in the city of Odessa: This man, while not highly cultured, and possessing no scholastic attainments, is very intelligent and observing and has a very practical point of view—an average citizen, as we would say.

This man has rather an uncertain and pessimistic view of the situation as regards the Government. He admits that conditions are very much better than they were a short time ago and that they will perhaps improve slowly, but he attributes this improvement in conditions largely to the coming of summer. He sees no immediate danger of the fall of the Government, although he thinks there will be a pinch during the coming winter and that perhaps this will result in a radical change. He adds, however, that the people whom he knows and who hold this belief are in the minority. He discounts the idea of the effectiveness of counter-revolutionary propaganda or military activities and feels certain that should this start the Government

would immediately clamp down on the entire country again. He is certain also that all chances of revolt and probability of collapse of the Government would end were they to permit the people to trade as individuals with foreigners and were they to do away with the monopoly on foreign trade now possessed by the Board of Foreign Trade. He says that discontent with the Government is universal and openly acknowledged. Furthermore, people do not hesitate in regard to expressing their dislike for the Government and the Communist Party. He gives, as an example of this fact, conversations which he overhears between his laboring men. These men know nor care nothing about the theory of different forms of government and politics; they are speaking purely from the results as it affects their daily life, and they are constantly grumbling with dissatisfaction at the Government. But, despite all this, he can see no immediate weakening in the State and expects a slow and painful evolution. He said all people are interested in Lenin's condition and are continually speculating as to what the outcome will be in case of Lenin's death.

(E) An American who has lived and traveled in Russia for about a year: This gentleman admits at the outset that the Government is vastly unpopular with the people. He does not see any collapse of the Government in view but expects it to constantly evolve and to gradually become more liberal. He thinks the death of Lenin would have little effect because of the allowances for this and well-laid plans for carrying on after he is gone. The people at present are very fearful of the Government. He thinks that during the last few years all the people have interested themselves in politics more than ever before, and that, after a fashion, they are receiving a rudimentary political education. He says the desire for recognition of the Government is widespread among the officials, but from his observation he certainly does not think the time ready for it as yet. He says that the great fear of the Government now lies in the socialists. These are viewed not so much as radical counter-revolutionists but as a more conservative Right. Although there are little if any evidences of such action, the Government is continually in fear of a counter-revolution, and he thinks that a powerful movement of this kind would be favorably received by the people. He says, further, that the major support of the Government is the Red Army.

From these varying points of view the following opinions seem to be in predominance:

(*a*) The unpopularity of the present Government is everywhere admitted.

(*b*) That the Government has most effectively quenched all powerful counter-revolutionary fires and that there is little danger from this source, although such a counter-revolution would be welcomed.

(*c*) That the Government rests to an almost total extent upon force as exerted by the Red Army, and that should the army disintegrate, the Government would certainly fall.

(*d*) That conditions are constantly becoming better, due to a relaxation of the grip of the State on the life of the individual.

(*e*) That the Government is in a constant state of alteration and that the final status of a republic will come by gradual evolution and not revolution.

In addition to the above, the following information seems well authenticated.

The Communist Party—the actual rulers of the State—number between 5 and 10 per cent of the total population. The party has been greatly reduced in the last year, due to the great "house cleaning" that was held last winter and is very gradually becoming smaller. This latter decrease is due to the desire of so many people, after they have held office under the party and have prospered in a financial way, to quietly retire from the party, move to other parts, and forget a great deal that has happened recently. This system of graft in office and then an endeavor for quiet retirement seems to be very popular everywhere. It is extremely difficult to gain admission to the Communist Party now, and the reason for this is all too apparent, and has everything in its favor, from a communist point of view. There is a great deal of open criticism against the communists from all classes of people; this fact is noted from all sources, and is substantiated everywhere. This universal unpopularity has been one of the many reasons for the party drawing its skirts about itself in regard to membership in order to present an undivided front.

The opinion held of Lenin is everywhere very high. People of all classes see him as a great ideal, a demigod, a profound thinker. There is little hatred toward him and little evil is laid at his door. Trotski is talked of much more than Lenin, but he is in no way as popular or as much admired as his chief. Trotski, the people say, is the rabid talker and worker; Lenin the thinker and the guiding brain. Lenin seldom, if ever, appears in public; Trotski is continually touring the country making speeches and spreading propaganda.

Last April there was some quiet rumor of counter-revolutionary work by agents of Petura, and the army feared, publicly at least, the possibilities of Wrangel, but at present all of this has subsided, and it can be said from information received from all sources that at present effective counter-revolutionary effort is dead.

AMERICANS IN RUSSIA.

15 September, 1922.

A striking feature of the information is the unanimity of opinion which the Americans in Russia hold in regard to certain important points. These men, who are on the ground and who have been in Russia for some time, are excellent judges from a common-sense point of view and their opinions are valuable. (1) They all agree as to the popularity of America, the Americans, and the American Relief Association among the masses of the people. Regardless of what the few officials might publicly say or what our official relations with the Russian Government may be, the people know America as their trusted benefactor, and official propaganda can not shake this. And the children whom the American Relief Association have befriended are growing up with this opinion toward America, which to us is an invaluable asset. (2) All Americans are opposed to recognition or official relations with the present government. They all agree that the "hands-off" policy is best, and approve of the present procedure of our Government in regard to Russia. They do think, however, that the Government is changing constantly; that the ultimate form will come in a process of evolution. This seems to be also the universal opinion of the naval officers who have visited Russian ports in destroyers. (3) In connection with the second point just mentioned, all Americans notice a decided change for the better in the internal political and economic condition of the country. Some are skeptical as to the permanence of these improvements, but the general opinion is that while a retardation may take place it will never come back to the extreme left. (4) They all agree that the proportion of the population in favor of the present Government is extremely small. This proportion, I have heard expressed, is between 2 and 5 per cent. Discontent is everywhere and is being expressed more and more, but all agree that a return to the monarchist government is impossible. With this dislike for the régime in power goes an apathetic and listless spirit of opposition. The fight has all been taken out of the people or else is held down by the continual pressure of the Government. This universal opposition to the Government has become almost a standing jest of the people and is a continual source of ridicule. (5) American Relief Association men everywhere see in the American Relief Association, in its activities, and in its liaison nature a very powerful political factor and one which is increasing daily in importance. This is thought to be accentuated by the recent decision of the American Relief Association to continue in Russia indefinitely. They think the American Relief Association invaluable because of the intimate connection it gives us

with the Russian people and that its activities will certainly be bread upon the waters for our own Nation.

(*b*) The full and sincere desire among the soviet officials for relations with our Government (and ours especially) is noticed everywhere and is admitted by all. The officials of the type of Forgovitz and Kasura have no hesitancy in admitting the prostrate condition of Russia, the absolute necessity (from their point of view) of relations, and if all were of their kind approaches might be possible. But among the higher officials, at least, the desire is largely if not entirely prompted by a hope of maintaining the present régime—their régime. The reasons as given by Rakovsky hide this most important one, which, of course, he omitted. Perhaps in this light may be explained the desire of the soviet officials to have the American Relief Association remain in Russia, not so much for the relief work as for the connection with American which it gives them and which they hope will evolve into official relations.

SPANISH COAL.

29 September, 1922.

The question of the use of British coal exclusively by the Spanish Navy continues to cause considerable controversy. The Spanish coal operators protest against this practice and claim that national coal could be used, while the naval authorities insist that the design of the boilers is such that coal from the Spanish mines can not be burned without great loss of economy. It is stated that the use of Spanish coal would so reduce the steaming radius as to seriously impair the efficient operation of the Spanish fleet.

In view of the conflicting statements on the subject, a colonel of engineers has been directed to make an exhaustive study of the entire subject and to confer with the coal operators with a view to devising some method by which Spanish coal can be used by the navy.

The principal difficulty seems to be that the Spanish coal is too fine to burn successfully in marine furnaces. It is thought that efforts may be made to supply it in the form of briquets. The policy of the Government is to use, whenever possible, national resources for the supply of the navy.

SWEDISH HARBOR OPENED.

22 September, 1922.

The new free harbor at Gothenburg, which was first projected in the year 1894, was opened on August 31. The improvement of the harbor represents a total expense of approximately 30,000,000 kronen. The harbor is situated on the right side of the Gota River, opposite

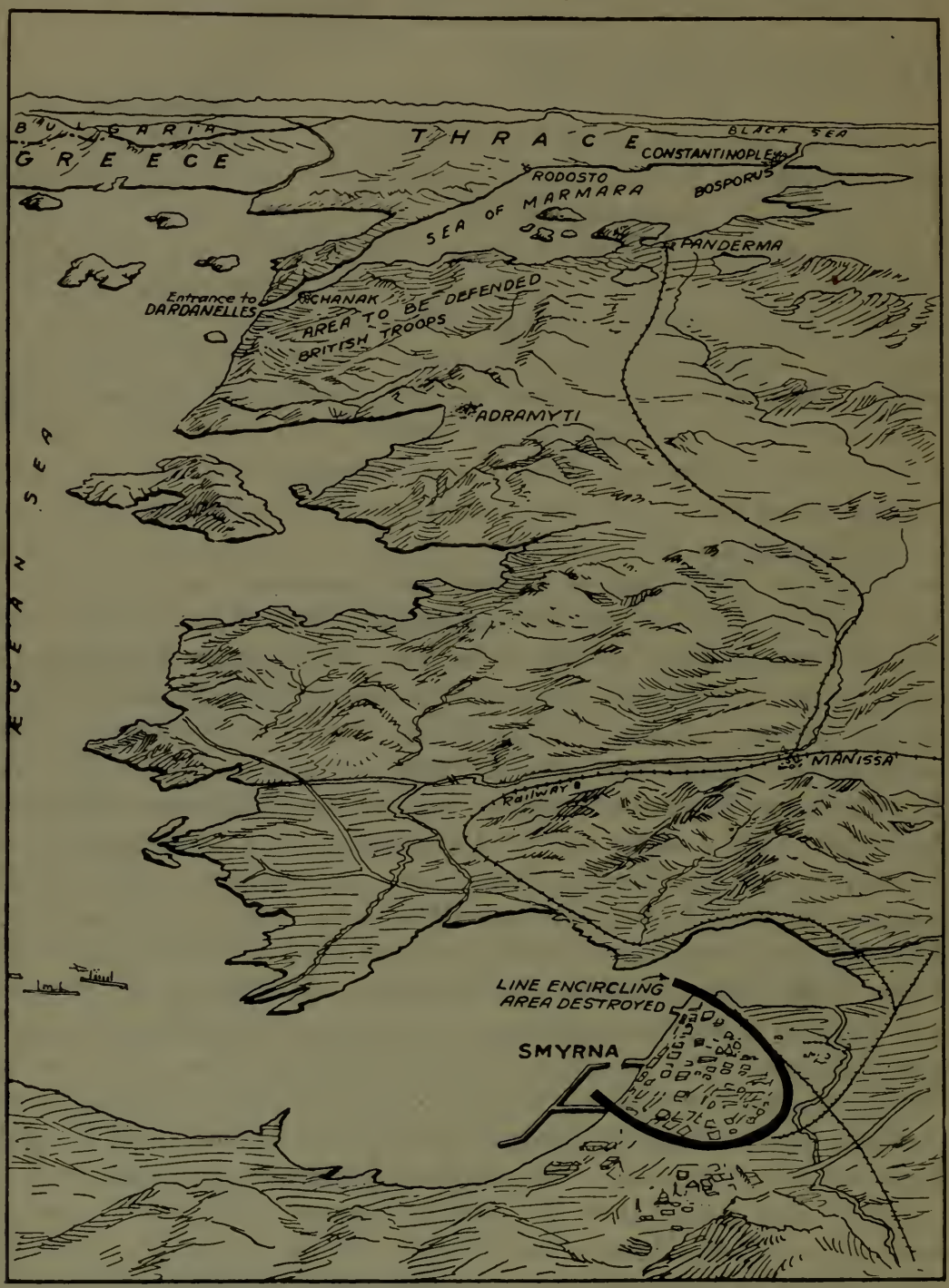
to the business section of the city, with which it is connected by the Hinsings Bridge. The harbor is the property of the city. That portion of the harbor which has been in use since last April represents only a part of the entire project.

SITUATION IN NEAR EAST.

10 October, 1922.

After the complete defeat and route of the Greek Army in Asia Minor, Mustapha Kemal turned his attention toward Constantinople and the Straits. Large detachments of his army were sent north in the direction of these two points. His intention, which he stated quite freely, was to pursue the beaten army across the Dardanelles and into Thrace, retaking Thrace before the Greeks had time to reorganize. When the Dardanelles were threatened the French and Italian forces were withdrawn, leaving about 7,000 British troops to defend the neutral zone as laid down by the three allied powers at the treaty of Sevres. The Turks contended that as the Allies had permitted the Greek Navy to base on Constantinople and freely use the Straits and Bosphorus in carrying on a war against Turkey, in which the Allies had proclaimed their neutrality, that certainly it was unjust to allow the Greeks to hide behind the neutral zone and reorganize their forces while the Turks were forbidden to cross. The French and Italians took the Turkish point of view, leaving Britain alone. Great Britain issued a warning to the nationalists against any encroachment in this neutral zone, but the nationalist forces continued to advance until they have occupied the entire Asiatic shore of the Dardanelles with the exception of Chanak, where the British forces are concentrated. The British argument is that if the Turks are allowed to cross into Thrace there is no telling where they will stop. They have reinforced their defenses from Egypt, Malta, and England. At Chanak the British and Turkish troops are glaring at each other through the barbed-wire defenses. The situation was proclaimed by Gen. Sir Charles Harington, the British commander in chief, to be impossible and an armistice was arranged to be held at Mudania to deal with the difficult military situation. During the discussions on October 3, 4, and 5 it was found that the allied generals proposed the retirement of the Greek Army from Thrace, which would be put under allied control and occupation. The nationalist delegate consequently informed them that the complete restitution of Thrace to Turkey must be accepted. General Charpy, in the name of France, said that he was ready to accept this in principle. The British and Italian delegates stated that they were only authorized to discuss the question on the basis of allied occupation and allied control. In

order to permit the British and Italian delegates to meet their respective Governments, the conference adjourned till the 6th. During the discussion at 8.20 p. m. on the 6th General Mombelli stated, in the name of the Italian Government, that his Govern-



THE DARDANELLES AND SMYRNA.

ment adopted the point of view of restoring Thrace to Turkey up to the right bank of the Maritza and including Adrianople, Karagatch, and the fortifications on the bank of the Maritza, the allied detachments and control commission to withdraw immediately and hand the Province back to the Turks. General Charpy confirmed

the attitude of his Government. The conference is in progress now and it is difficult to state what the outcome will be.

The Turkish Army has assumed a line from Kilia, on the Black Sea, to Gebze, on the Gulf of Ismidt, well inside of the neutral zone. The British reconnaisance planes report these troops advancing in the center toward the Bosphorus.

The Turkish troops are in complete occupation of the Asiatic shore of the Dardanelles except at Chanak and the British have already begun to evacuate Chanak and move to Gallipoli side, fortifying Kilid Babe.

During the pourparlers at Mudania, England has rushed in troops and ships. She now has a very formidable naval force and a thorougly modern well-trained army of about 40,000. She has a battalion of the Royal Air Force and about 120 planes, 18 of which have already been assembled. The French and Italians will not fight the Turk, but they have respectively 7,000 and 2,000 in the vicinity of Constantinople, which will be useful in maintaining order.

The Turks have no navy nor any transports for transferring their army to Thrace.

The French are in favor of giving way to all the demands of the nationalists in order to avoid war at any price. They consider that the consequences of war between England and Turkey will result in another World War, in which Russia will attack Rumania through Bessarabia and Bulgaria will join Turkey in order to get back what she lost in Macedonia during the recent war. England considers that to give way to Turkey would be a great blow to her prestige throughout India, Egypt, Palestine, and Mesopotamia. Some think that if the nationalists are allowed to enter Thrace with their army, that this army will not stop at the Maritza River but will enlist the aid of Bulgaria, Soviet Russia, and possibly Germany and march westward. The British are very bitter against the French.

The Turks think that England is playing for time in the present conference in order to bring in sufficient troops to hold Constantinople and the Straits. They do not think that Lloyd-George has any idea of returning Constantinople to them in accordance with the terms of the Sevres treaty. They said that England's intention is to hold the Dardanelles and make a second Gibraltar of them; that Lloyd George is delaying settlement as long as possible not only to bring up reinforcements but to give him time to educate the British people up to a desire for war through his anti-Turkish newspaper propaganda and his pretence of fighting against Turkish oppression of Christian minorities. They consider Lloyd-George their enemy rather than England. They say he is not the mouthpiece of the British people but of Venizelos and Sir Basil Zaharoff.

17052—22——5

FRENCH OPINION OF TURKISH PROBLEM.

Source: Translation from Journal des Debats.

11 September, 1922.

The greater number of our (French) papers, in their zeal for the Turkish cause, lost sight of the real situation. Diplomatically, we are still at war with Turkey, the treaty of Sevres, signed 10 August, 1920, not yet being ratified. It can not be pretended that the solution of the problems of Constantinople, the Dardanelles, and Thrace can be brought about by Greco-Turkish negotiations. The allied troops are not in Constantinople because of the campaign in Anatolia, but because of the victory of 1918. From reading many of our newspapers it would almost seem that the Turks had been on the side of the Allies in the war from 1914 to 1918 and that they had assisted in defeating the Germans. Some of our contemporaries claim that the Turk is the best defender of the Dardanelles. This position is untenable. As a matter of fact in the only case in history when the free passage of the Dardanelles was of vital interest, the guardian of these straits, in abuse of our naiveté, joined with our enemy and closed the line of communication by water, involving enormous loss and very seriously prolonging the war.

This same Turkey, represented up until now as a good and true friend, is likewise suspected of having affiliations with Bolshevik Russia. They may well resume their former relations with Germany. In any case if the Turks succeed in reinstalling themselves on the Dardanelles, on the Sea of Marmera and the Bosphorus, under former conditions—that is to say, in unrestricted control—they will have the right to affirm that having been beaten in 1918 they have taken a brilliant revenge in 1922. This reversal of the situation will have its immediate effect in the east. There are those among us who rejoice in the present embarrassment of the English in Mesopotamia. Let them beware lest later we be in the same situation in Syria. Ignorance of the psychology of the orientals is profound. And it is not only in the Orient that we notice the spirit of revenge against the winners of the war of 1918, but we may be sure that in Germany recent events inspire little cheer.

In making these observations, seemingly inspired by good political sense, we do not pretend to predict what should be decided concerning Constantinople and Thrace. The siuation is most complex and requires minute examination. But occidental Governments can not in prudence refrain from the exercise of their right to solve these problems, which to them are most vital. The questions which will arise will not be questions of peace between Turkey and Greece, but between the Turks and the Allies, between whom no treaty has as yet been signed, as we are prone to overlook. Paris, London, and Rome should come to prompt agreement on this subject, and in par-

ticular upon the questions of Constantinople and the Dardanelles; in these questions the allied interests are in agreement, however divergent they may be on other questions.

In this particular, the responsibility of England had been particularly great. The armistice concluded by her at Mondros, her greedy and imprudent policy in the middle east, the contradictory declarations of Mr. Lloyd-George, the pretension of being sole mistress in Constantinople, the encouragement given to ambitious Greek adventures, all these lend to the particular character of the defeat which has followed the victory of 1918. The British cabinet will therefore do well to modify their dangerous methods and be less high handed. And on our side, we must strive to reestablish agreement under conditions satisfactory for us. When it is a question of the Allies pushing to do injury, it is a German sentiment and not French.

BRITISH POLICY IN TURKISH SITUATION.

21 September, 1922.

The British Government has recently been attempting to educate its public by intelligent articles in the press as to the political and commercial importance of the Dardanelles. An article published September 20, 1922, presents to the people the reason for the policy just adopted toward the Turks.

This article states that the "British fleet is able to make any attempt to throw troops across the straits impossible," and sets forth very clearly the great importance of free access to the straits.

The trade of Great Britain, it is pointed out, and, indirectly, the welfare of British wage earners, is at stake.

The importance of the Black Sea trade and the economic advantage in keeping the straits open are also emphasized.

To explain the necessity of the presence of the British fleet at the Dardanelles, the article points out that "a British merchant ship can go nowhere in safety unless it can be followed by a man-of-war."

STATEMENT OF MUSTAPHA KEMAL PASHA.

23 September, 1922.

On September 23 Mustapha Kemal Pasha granted an interview to an American naval officer and Mr. John Clayton, representing the Chicago Tribune. This interview took place at Smyrna. During the course of the interview Mustapha Kemal dictated his views and political aims, which were typed and handed to these gentlemen at the end of the interview. The following is a translation:

"We have often made clear our position regarding the straits," began His Excellency Mustapha Kemal Pasha, "but it will not be

in vain to reiterate this position once more. Our point of view is that of the whole world. We want to open the straits and see to it that they are kept safe. Therefore it would not occur to us to erect fortifications on the straits. Consequently we are ready to do away with the existing fortifications, but we have our capital on the Bosphorus and its safety must be secured. For its safety that of the Sea of Marmora is necessary.

"We have only to insist on two principles: (1) Freedom of the straits; (2) safety of our capital. On this basis we are ready to accept any solution fulfilling these demands which may be proposed by all the interested powers of the world. This is a matter of principle not laid down to-day. The foundations for the Grand National Assembly were laid on this and similar fundamentals. Therefore we expect the whole world to believe in our sincerity in this and other points. The state of freedom from the States is in accord with the real interest of the Turkish Government and the National Assembly. I would call to mind that in former days it was not the Turkish Government that closed the straits but that England was interested to do so against Russia. Freedom of the straits is our desire, and we believe it is in conformity with the desires of the whole world, excepting a single power, England, which is interested in closing them, if they are closed by England herself.

"England has not expressed openly this view to its allies, but it maintained the Greeks on the Dardanelles, using them as an instrument in closing this waterway. Great Britain has always said it was interested in the freedom of the straits; but this can not be true. If they were, there would be no differences of opinion between the British and Turkish Governments, because we have repeatedly declared for free passage of the Dardanelles.

"There are two solutions of the question: (1) Freedom of the straits; that we and the rest of the world would desire. (2) Closing of the straits to British control or instruments.

"If the British desire freedom of the Dardanelles, there is no question. If they are for closing the straits, either through agents or directly by themselves, the world must define its position. In view of the present condition of the armies of the Great National Assembly the straits are already in our hands or under our influence." His excellency had previously explained that the Turkish nationalist troops had entered the town of Arenkioi on the Dardanelles. "But we have no desire to take advantage of the position or to interfere with their freedom. It remains with the rest of the world to unmask England and get to the bottom of her attitude. I am sure that France, Italy, and the United States are aware of the real idea of the British. It remains for them to declare and publish it."

"What form of guaranty for the safety of Constantinople and the Sea of Marmora would your excellency suggest," I asked.

"I would prefer not to suggest any solution in the name of the Government, but to let the interested powers decide and to accept their decision. Personally, I believe that many projects could be thought of and discussed. The Government and the Grand National Assembly are ready to take upon themselves an engagement to the whole world not to interfere with the freedom of the straits under any conditions. Should we break faith in this engagement it would mean hostilities with the whole world. We could gain nothing by an abrogation of such an agreement. More positive guaranties could be offered, such as not to fortify the straits, not to keep the straits equipped with anything to close them.

"The safety of Constantinople and the Sea of Marmora implies that no foreign fleet would enter freely with full force through the straits. If there are reservations imposed for the entrance of the straits, this question would be settled. To go more into details, should a foreign fleet wish to come to Constantinople they must notify the Turkish Government. All ships could not enter at one time; one could pass the Dardanelles, then another after the first one leaves, etc. Interested powers would guaranty mutually that the safety of the Turkish capital would not be interfered with, and that in the event of such interference the infringing country would be attacked by all.

"In powers like Greece, which can be used as instruments if other powers are deprived of their fleets, this would act as a further guaranty of the safety of the Sea of Marmora.

"All of these questions can be settled by the employment of a mixed commission. The existence of an armed force or larger measures are unnecessary. To sum up the whole matter, Turkey never considered the question of the straits as a Turkish question, but as an international one. Therefore it rests with the interested powers to assure themselves that the proper guaranties are taken for the complete freedom of the straits and the safety of Constantinople and the Sea of Marmora.

"Besides, as you know, there is a treaty with Russia, under which Turkey guarantees to take this point of view towards Russia, the Ukraine, Georgia, etc. After this statement we can easily see that the alarming pronouncements of the British Government, that we might close the straits, are baseless. It is a human duty and a duty for the peace of the world to make known the real meaning of the English statement regarding the straits or their closing.

"It would be illogical if the pursuit of an enemy we have beaten in Asia Minor were denied us, while they reorganized in Thrace to

make future trouble in the Turkish Empire. The British have declared a neutral zone. It is not neutral, but a scheme to protect the remnant of the Greek Army. The true aim of the British Government in denying us free passage of the Dardanelles is to protect Greece. Therefore we do not find it just or reasonable that other powers should share this view with the British Government. The British Government has two aims in its present attitude: (1) To save the remnants of the Greek Army; (2) to keep possession both of the Dardanelles and Constantinople. Even if they do not keep possession of Constantinople, they hope to maintain their position at Gallipoli, which means indirect control of our capital. The present British Government is resorting to every sort of influence in order to fool other powers. At the present moment they wish to deceive the other powers in order to drive them into any adventure, but I do not think that these other powers will lose their reason in so far as to fall in with Great Britain. Policy of the present British Government is so dangerous that it is not only unacceptable to the rest of the world powers but also to a large part of the British public. If the British nation leaves its public affairs in the hands of a statesman like Mr. Lloyd-George for any length of time it will be creating irreparable breaches in the foundations of the British Empire. We must conclude that men like Mr. Lloyd-George are handling the Near East question with an amazing lack of knowledge and foresight."

THE BURNING OF SMYRNA.

14 September, 1922.

All the morning of September 14 the glow and then the flames of Smyrna could be seen. We arrived about an hour before dawn and the scene was indescribable. The entire city was ablaze and the harbor was light as day. Thousands of homeless refugees were surging back and forth on the blistering quay—panic-stricken to the point of insanity. The heartrending shrieks of women and children were painful to hear. In a frenzy they would throw themselves in the water, and some of them would reach the ship. To attempt to land a boat would have been disastrous. Several boats tried it and were immediately swamped in the mad rush of a howling mob. Every man's thoughts were to save himself. Women who jumped or were pushed overboard got out as best they could. The crowds along the quay beyond the fire were so thick and tried so desperately to close in abreast the men-of-war anchorage that the masses in the stifling center could not escape except by sea. Fortunately there was a sea breeze, and the quay wall never got actually hot enough to roast these unfortunate people alive, but the heat must have been terrible there to have been felt on the ship

200 yards away. To add to the confusion, the packs belonging to these refugees, consisting mostly of carpets and clothing, caught fire, making a chain of bonfires the length of the street. Occasionally the pack on a horse's back would take fire and he would go charging through the crowd at breakneck speed, knocking right and left the Christian minorities. Truly a fiery steed! The United States headquarters at the Smyrna theater appeared like a large ball of fire. So hot was it in the streets in front of this building that four automobiles and two trucks parked at the doorway were burned to cinders. Some of us saw grim humor in the sign over the arched door in black letters 2 feet high. It was the name of the last "movie" shown, "Le Tango de La Mort." And through all this heat and flame and tumbling of walls by some queer chance our flag remained. Even now it flies over the scanty remains of the front wall—black, it's true, but an inspiration to many and a ray of hope to homeless thousands.

A popular rumor, accepted as fact by most people, was that the Turks had machine guns stationed at the ends of the street and were shooting down all who attempted to escape. This sounded incredible because the Turks could easily have massacred the entire crowd had they so desired. Fortunately for the truth of this story, we had two men ashore from the *Lawrence* acting as chauffeurs. They spent the night on the outskirts of the mob at the southern end of the street, where the Turkish general headquarters is located. At about 7 a. m. I went ashore to try and verify the report. I located the two sailors in their cars. Their stories were identical. They both stated that they had seen Turks spreading the fire. The Turk used rags soaked in oil, which they threw in windows as they ran down the narrow streets in the Armenian quarter. When questioned about the Turks using machine guns to drive the refugees down the quay toward the fire, they denied it, and said, on the contrary, they were very much surprised to see Turkish soldiers leading the crowds into the Konak grounds, where they brought them water and treated them very kindly.

At a time when it looked as if the entire crowd must perish from the heat of the flames, the senior United States naval officer sent a marine officer to describe the conditions to the British and French admirals, who were anchored farther out in the bay. The French admiral was ashore and the British admiral at first would do nothing. Finally, his chief of staff convinced him that action was necessary and he consented. Having decided, he did the job very well. Lowered all boats and in a short time every man-of-war in the harbor was loaded down with refugees. As the *Litchfield* had only one small boat, she depended entirely on the *Iron Duke's* boats to fill her up. One young Armenian girl made a very brave swim out to the ship.

The Turks say the fire was set by the Armenians and that 22 of the guilty parties confessed; that the Turks only burned houses in fighting the fire with fire. The French pretend to believe this. I am convinced in my own mind that the Turks burned the town. They burned it to force the Allies to evacuate the non-Moslems. Their slogan is "Turkey for the Turks."

They consider that all their troubles during the past 40 years can be attributed to the propaganda spread by the Christian minorities. There has been no massacre, but a great deal of killing. Very discriminate killing. Looting and holdups have been quite common and can be seen in broad daylight on prominent streets. Little attention is paid to it by the population; none by the military. The Turks never miss an opportunity to frighten the Armenians and the Greeks. In passing through a crowd of refugees they will invariably feel of their bayonets' points, whet their sabers, or work the bolts of their guns. I have known the mere sight of a Turk to scatter men, women, and children as if a bomb had been thrown amongst them. They go completely mad and will scream as long as their voices last, then whimper for hours. It is a campaign planned to run them out of the country. The Turks do not desire to kill them; if they did they could have slaughtered the entire lot—hundreds of thousands of them—in a day. They don't care what the world says; that isn't the reason they don't massacre, for the ones whom they have killed have lain for days on prominent streets free for all to see. But they have terrorized the entire Christian population. The Greeks burned their homes in the interior and they took refuge in Smyrna. The Turks have burned their refuge in Smyrna, so they must keep going west. I can put forth a dozen arguments which will show clearly that the Turk must be the loser in following such a policy; so can you. You ask, then, what argument he uses in following it? My answer is, "I don't know; I haven't an oriental mind."

10 p. m.

The panic on the quay continues. The head of a family will get hold of a caique with the idea of putting his family aboard and pulling out to one of the ships in the harbor and beg to be taken aboard. He will put all his women folk aboard and before he can shove off a dozen men have jumped for it, capsized or swamped the boat, and several simple peasants who have never been in water are drowned.

This afternoon I took a party of three men ashore to rescue an American's wardrobe. We smashed in the door and accomplished our mission. Returning in the motor dory we passed astern of the French destroyer *HV* close to the quay. Just as the coxswain attracted our attention to a "Chetta" on the quay who was taking a bundle away from a woman, the destroyer opened fire with a machine

gun, bringing the man down neatly at 300 yards. Though the quay was crowded no one paid the slightest attention to the dying man as he writhed on the ground. Other people's lives appear to have no value in these parts.

In a discussion at dinner to-night I heard the estimate of killed in Smyrna during the last four days placed at from 1,000 to 45,000. The man who said "at least 45,000" had made the trip through the Armenian quarter twice a day during the period and admitted that altogether he had only seen 23 dead. I am beginning to understand how the massacre figures are arrived at. Each person who goes through wants his or her's to be a record breaker.

EVENTS IN SAMSOUN.

20 September, 1922.

Information received at Samsoun from Angora reports many atrocities committed by the Greek Army in their retreat. As an example of these reports: "At Ushak nearly 2,000 houses intentionally burned under supervision of the Greek general commanding officers. Nearly 100 women killed and annihilated with various savagery that human being blushed. The premier has already protested the enemy's oppressions and tyrannous atrocities through representative of Constantinople."

"The attitude at the Near East headquarters in Samsoun is very anti-Turk. They give you the idea that their minds were made up before they left the United States and that they have not changed. According to them there is not a single Turk in Kemal Pasha's cabinet; they are all Albanians. They say this Government can not last with the Turks, even after driving the Greeks out of Asia Minor. They believe that this country will never open up to American trade or to any foreign trade to any great extent. They say that it is not the nature of a Turk to become modernized; that he will continue to resent the influx of any western modern methods of business or developments in the country." This is quoted merely as an example of the narrow-mindedness of some of the employees of the benevolent and relief institutions in the Near East.

RUSSIAN BOLSHEVIK PROPAGANDA AMONG GREEKS.

20 September, 1922.

The Russian Bolshevik organization in Varna, Bulgaria, has sent representatives to work amongst the defeated Greek troops in Thrace, particularly the refugees along the northern shore of the Marmora. Many agents have also been sent from Varna into Constantinople during the past week.

BRITISH FORCES IN EASTERN MEDITERRANEAN.

29 September, 1922.

During the crisis in the Near East the following concentration of units of the Royal Navy, Army and Air Force was recorded:

NAVY

Practically the entire Mediterranean Fleet was concentrated in the area Dardanelles, Sea of Marmora, and Bosporus.

The following naval units were detached from the British Atlantic Fleet and ordered as reinforcements to the British Mediterranean Fleet:

First Battle Squadron.—First division: *Barham* (flag of V. A. C.), *Malaya*, *Valiant*, *Warspite*. Second division: *Revenge* (flag of R. A.) *Ramillies*, *Resolution*, *Royal Oak*.

Second Light Cruiser Squadron.—Curacoa (flag), *Caledon*, *Carysfort*, *Castor*, *Cordelia*. The *Cambrian* has been ordered to join this squadron. *Curacoa*, *Carysfort*, and *Cordelia*, of this squadron, were known to be in Turkish waters. The exact whereabouts of the *Caledon* and *Castor* were not known.

Second Destroyer Flotilla.— Spencer (flotilla leader), *Vanquisher*, *Vectis*, *Venetia*, *Viceroy*, *Violent*, *Viscount*, *Winchelsea*, *Wolfhound*.

Third Destroyer Flotilla.—Campbell (flotilla leader), *Verity*, *Veteran*, *Wanderer*, *Wild Swan*, *Wishart*, *Witherington*, *Wivern*, *Wolverine*.

Aircraft carrier *Argus*.

Second submarine flotilla.—Lucia (depot ship), *Adamant*, *L–18*, *L–21*, *L–23*, *L–25*, *L–52*, *L–56*, *L–71*.

First destroyer flotilla.—Wallace, (flotilla leader), *Vancouver*, *Velox*, *Versatile*, *Vortigern*, *Walker*, *Warwick*, *Watchman*, *Whirlwind*.

The destroyers *Rigorous* and *Romola*, which were in reserve at Gibraltar, received full complements and proceeded to Turkish waters.

The complements of the battleships *Centurion* and *Ajax* were raised to full complements, and these vessels proceeded to Turkish waters.

The light cruiser *Ceres*, of the Mediterranean Fleet, was recommissioned and proceeded to Turkish waters.

The light cruiser *Vindictive* carried troops and airplanes.

The flagship of the British Atlantic Fleet, the *Queen Elizabeth*, remained in the Firth of Forth.

The first light cruiser squadron and the fourth destroyer flotilla are just completing a special cruise in the Baltic and, as these are the only other light forces with full complements available, it is

probable that they will be dispatched to the Near East should the situation there become more serious.

In accordance with the usual procedure in emergencies, the Admiralty suspended publication of the movements of British vessels of war in the Mediterranean.

ARMY.

The following troops were concentrated in the Near East:

The Irish Guards were already at Constantinople. The First North Staffordshire Regiment, stationed at Gibraltar, left in the transport *Hecuba* on September 19, and arrived at Constantinople on September 28. Large quantities of war material were also shipped in the *Hecuba*.

The First Gordan Highlanders (about 600 men), the Second Royal Sussex, and the Tenth Medium Battery are leaving Malta at once for the Near East.

The King's Own Scottish Borderers and the Highland Light Infantry disembarked from the transports *Somali* and *Scotian* on September 25 at Chanak. These two battalions came from Egypt.

Two batteries of a pack brigade, Royal Garrison Artillery, were ordered from Cairo.

The Seventeenth Brigade, R. G. A., from Ismailia and a detachment of the Signal Corps from Cairo are proceeding to Chanak.

It is understood there will be no further departures from Egypt.

The dispatch of a brigade of British infantry to the Near East was completed on September 27.

The first battalion of the brigade to leave was the Second Battalion Grenadier Guards (over 1,000 men), which entrained at Aldershot on September 22, and sailed in the *Empress of India* from Glasgow on September 23. The Twelfth Company Royal Engineers was also on board.

On September 27 the three remaining battalions were dispatched, namely: The Third Battalion Coldstream Guards (about 1,000 men), under the command of Lieut. Col. W. St. A. Warde-Aldam; the Second Battalion Royal Fusiliers (about 800 men), under the command of Lieut. Col. M. P. Handcock; and the Second Battalion Rifle Brigade (about 800 men). This battalion, together with the First Brigade staff, and details from the R. A. M. C. sailed from Southampton in the liner *Manora*, Colonel Commandant Steel commanding.

The *Manora*, 7,888 tons, and the *Corsican*, 11,438 tons, belonging to the British India and Canadian Pacific Co.'s, respectively, were requisitioned by the government as troopships. The *Corsican* sailed for the Near East on September 30, carrying a similar number of troops to that on the *Manora*.

On September 23, just over 1,000 Royal Marines left Southampton in the *Kinfauns Castle* for the Near East. The Eleventh Royal Marine Artillery, from Eastney, was aboard, and Royal Marine Light Infantry drafts from Chatham, Plymouth, and Portsmouth.

Two pack batteries, Royal Garrison Artillery, received orders for service, and marched from Longmore camp, south of Aldershot, to a military siding and entrained on September 29 for the Near East.

The following is reported from Constantinople, under date of 28 September, 1922:

The North Stafford Battalion and 1,000 men of the R. A. F. landed this morning and marched through the town with their bands playing. Their arrival has produced a most reassuring effect on public opinion, which considers the presence of British troops as the only guaranty against a repetition of what happened in Smyrna. The men were in first-class condition.

No noteworthy change is reported from the Chanak region. The Turkish cavalry have moved up against our advance lines, and apparently the Turkish instructions to their force in this region are to advance as far as they can without meeting resistance. They are now practically up against our wire, behind which we are entrenched. Obviously the situation can not be indefinitely prolonged.

Owing to this unexpected dispatch of troops from England there will be no army maneuvers this year.

AIR FORCE.

The Two hundred and sixty-seventh Air Squadron, from Malta, went to the Constantinople area with the fleet. The Two hundred and eighth Squadron of the Royal Air Force, stationed at Ismailia, Egypt, has also been transferred to Constantinople. It is understood that these two units give a valuable fighting force of about 30 machines, with an equal number in reserve.

ARMENIAN ATTITUDE TOWARD FRENCH.

6 October, 1922.

It appears that the Armenians in refugee camps in Thrace are violent in their dislike toward the French. Investigation shows the following reasons for their hatred: .

It will be remembered that in 1920, when the French were fighting the Turks in Cilicia, they recruited an Armenian Foreign Legion, equipped them with French rifles and uniforms, and used them in their campaign against the Turks. Quite naturally when such favorable opportunity arose to pay off old scores against their traditional enemies the Armenians laid waste to the country, drove the Turks from their homes, and occupied these Turkish homes themselves. These Armenians were, of course, Ottoman subjects and

were therefore committing an act of high treason. When France signed a treaty with Turkey and withdrew from Cilicia the Armenians who took part in the fighting against the Turks were arrested by the Turks. In attempting to defend themselves against the Turkish charges of high treason they would ask, of course, what proof the Turks had, and usually the Turkish authorities could confront them with the photograph of the Armenian on trial in a French uniform. The Armenian deduction is that after having fought for France the French betrayed them by turning over these photographs and thereby identifying them to the Turks.

VALUES OF FOREIGN CURRENCIES.

Source: Federal Reserve Bank of New York.

30 SEPTEMBER, 1922.

Country.	Monetary unit.	Noon buying rate for cable transfers in New York (value in U. S. dollars).
Europe:		
Austria	Krone	$0.000014
Belgium	Franc	.0711
Bulgaria	Lev	.006317
Czechoslovakia	Krone	.030817
Denmark	do	.2027
England	Pound sterling	4.3749
Finland	Markka	.021975
France	Franc	.0758
Germany	Reichsmark	.0006
Greece	Drachma	.0260
Holland	Guilder	.3873
Hungary	Krone	.000393
Italy	Lira	.0424
Yugoslavia	Krone	.003378
Norway	do	.1713
Poland	Mark	.000114
Portugal	Escudo	.0379
Rumania	Leu	.006119
Serbia	Dinar	.013486
Spain	Peseta	.1511
Sweden	Krona	.2631
Switzerland	Franc	.1865
Asia:		
China	Chefoo tael	.8000
Do	Hankow tael	.7933
Do	Shanghai tael	.7648
Do	Tientsin tael	.8050
Do	Hongkong dollar	.5702
Do	Mexican dollar	.5568
Do	Tientsin or Peiyang dollar	.5650
Do	Yuan dollar	.5633
India	Rupee	.2835
Japan	Yen	.4802
Singapore (S. S.)	Dollar	.5133
North America:		
Canada	do	1.000069
Cuba	Peso	.999375
Mexico	do	.4830
Newfoundland	Dollar	.997578
South America:		
Argentina	Peso (gold)	.8023
Brazil	Milreis	.1145
Uruguay	Peso	.7662
Chile	Peso (paper)	.1368

30 OCTOBER, 1922.

Country.	Monetary unit.	Noon buying rate for cable transfers in New York (value in U. S. dollars).	Value a year ago.
Europe:			
Austria	Krone	$0.000014	$0.0004
Belgium	Franc	.0652	.0713
Bulgaria	Lev	.006442	.....
Czechoslovakia	Krone	.032361	.0098
Denmark	do	.2009	.1905
England	Pound sterling	4.4400	3.93
Finland	Markka	.023625	.....
France	Franc	.0709	.0727
Germany	Reichsmark	.000216	.0059
Greece	Drachma	.0202	.0469
Holland	Guilder	.3909	.3407
Hungary	Krone	.000403	.0013
Italy	Lira	.0407	.....
Yugoslavia	Krone	.004408	.0034
Norway	do	.1791	.1318
Poland	Mark	.000081	.0002
Portugal	Escudo	.0553	.....
Rumania	Leu	006479	.0067
Sérbia	Dinar	.017614	.0136
Spain	Peseta	.1527	.1333
Sweden	Krona	.2671	.2250
Switzerland	Franc	.1831	.1839
Asia:			
China	Chefoo tael	.7742	.....
Do	Hankow tael	.7725	.....
Do	Shanghai tael	.7441	.8050
Do	Tientsin tael	.7858	.....
Do	Hongkong dollar	.5536	.5737
Do	Mexican dollar	.5415	.....
Do	Tiestsin or Peiyang dollar	.5529	.....
Do	Yuan dollar	.5492	.....
India	Rupee	.2900	.2725
Japan	Yen	.4804	.4793
Singapore (S. S.)	Dollar	.5192	.....
North America:			
Canada	do	1.001146	.....
Cuba	Peso	.998688	.....
Mexico	do	.4830	.....
Newfoundland	Dollar	.998594	.....
South America:			
Argentina	Peso (gold)	.8166	.....
Brazil	Milreis	.1118	.....
Uruguay	Peso	.7731	.....
Chile	Peso (paper)	.1374	.....

BUILDING PROGRAMS.

September 1, 1922—Ships building and projected.

NOTE.—No restrictions on any type except capital ships and aircraft carriers.

	Great Britain.		United States.		Japan.		France.		Italy.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Light cruisers, first line	4	34,600	10	75,000	21	136,600	3	24,000	2	16,000
Destroyer leaders	2	3,500	0	0	0	0	6	14,400	6	12,270
Destroyers, first line	6	7,450	[1] 0	0	38	49,155	12	16,800	12	11,680
Submarines, first line	6	5,550	34	29,575	16	13,480	12	13,200	4	2,600
					28	(2)				
Fleet submarines	2	3,800	[3] 3	6,375	3	4,500	0	0	0	0
Aircraft carriers	Estimated all powers will build aircraft carriers up to tonnage allowance.									

[1] 12 destroyers authorized but not under contract.
[2] Tonnage unknown.
[3] 6 additional fleet submarines authorized but not under contract.
NOTE.—Aircraft carrier tonnage allowed by treaty as follows: United States, 135,000; British Empire, 135,000; Japan, 81,000; France, 60,000; Italy, 60,000. No aircraft carrier to exceed 27,000 tons, except that each power may build two of 33,000 tons, provided tonnage allowance not exceeded thereby.

Ships retained September 1, excluding those to be scrapped under treaty; ships over 12 years of age not included.

	Great Britain.		United States.		Japan.		France.		Italy.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Capital ships	22	[1]580,450	18	[2]500,650	10	301,320	9	194,421	6	143,000
Cruisers, first line	2	34,600	0	0	0	0	0	0	0	0
Cruisers, second line	0	0	0	0	0	0	2	28,200	2	21,000
Light cruisers, first line	41	171,880	0	0	11	54,850	4	19,260	5	21,000
Light cruisers, second line	13	69,230	0	0	0	0	1	3,444	5	17,300
Destroyer leaders	17	29,458	0	0	0	0	1	2,485	6	10,300
Destroyers, first line	178	200,383	295	350,591	54	56,035	20	19,122	27	21,649
Destroyers, second line	6	4,200	21	15,582	12	7,850	24	16,397	16	11,840
Submarines, first line	42	33,740	59	37,120	27	23,538	24	18,403	10	8,040
Submarines, second line	34	14,608	27	10,645	8	2,689	24	9,610	33	9,610
Fleet submarines, first line	6	11,280	3	3,318	0	0	0	0	0	0
Fleet submarines, second line	6	7,200	0	0	0	0	2	3,094	0	0
Monitor submarines	3	4,800	0	0	0	0	0	0	0	0
Aircraft carriers, first line	4	62,590	0	0	0	0	1	24,830	0	0
Aircraft carriers, second line	3	25,900	1	12,700	1	9,500	0	0	0	0

[1] On completion of two new ships to be constructed, Great Britain will scrap four capital ships, and total tonnage retained will be 558,950.
[2] On completion of West Virginia and Colorado, United States will scrap North Dakota and Delaware, and total tonnage retained will be 525,850.

Ships to be scrapped by treaty.

	Great Britain.		United States.		Japan.		France.		Italy.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Old capital ships	20	408,500	15	227,740	10	164,000	0	0	0	0
Capital ships under construction	0	0	13	552,600	6	255,800	0	0	0	0

NOTE.—Any of the powers may retain any two ships, which would otherwise be scrapped, for conversion to aircraft carriers, providing displacement of each does not exceed 33,000 tons.

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OFFICE OF NAVAL INTELLIGENCE.
NAVY DEPARTMENT.
Washington, D. C.

MONTHLY INFORMATION BULLETIN.

NUMBER 12—1922.

15 DECEMBER, 1922.

DISTRIBUTION:

In general: Bureaus of the Navy Department; all force commanders; all commanding officers of capital ships, the larger patrols, destroyers, and submarines.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1922.

CONFIDENTIAL.

OFFICE OF NAVAL INTELLIGENCE.

MONTHLY INFORMATION BULLETIN.

NUMBER 12—1922—15 DECEMBER, 1922.

FOR CONVENIENCE IN ROUTING.

Officer.	Initials.	Date received.	Date forwarded.
Captain			
Executive Officer			
First Lieutenant			
Navigating Officer			
Gunnery Officer			
Communication Officer			
Engineer Officer			
Medical Officer			
Supply Officer			
First Division Officer			
Second Division Officer			
Third Division Officer			
Fourth Division Officer			
Fifth Division Officer			
Marine Officer			

The attention of commanding officers is particularly invited to the instructions on the inner side of the cover page. The usefulness of this Bulletin is largely determined by the number of officers who read its pages. While serving directly the senior officers in keeping them in touch with current progress in the naval art and in diplomacy, it should also promote study and broad reading on the part of the younger officers.

Lack of funds makes impractical the placing of a copy of the Bulletin in the hands of each officer of the ship. It is therefore requested that all officers be urged to read the captain's copy of the Bulletin. The subject matter is of necessity confidential, but the Office of Naval Intelligence would appreciate any action tending toward a broader circulation [with proper safeguards] among officers of all grades.

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GREAT BRITAIN.

COMMANDING OFFICER OF THE "RALEIGH."

4 November, 1922.

The commanding officer of the light cruiser *Raleigh* was tried by court-martial at Portsmouth on October 27 on a charge of negligently or by default stranding and losing his ship off the Labrador coast on August 8. The court found the charge proved, and sentenced him to be reprimanded and dismissed his ship. It was urged in defense that Amour Point was incorrectly marked on the official charts.

GREAT BRITAIN.

GYRO COMPASS COURSE.

19 October, 1922.

A fleet order recently issued emphasizes the growing importance and necessity of a thorough working knowledge by those officers responsible for the efficiency of gyro installations.

It specifies that every officer who has qualified in navigation for first-class ships should apply for a course of instruction in gyro compasses.

It is stated that the ordinary courses are held almost continuously from October to April, and special arrangements are made for the summer months. The courses consist of 10 working days, and it is suggested that officers serving afloat should arrange to take these courses during period of refit of the ships to which they are attached.

GREAT BRITAIN.

AIR LINER.

1 November, 1922.

Source: Press.

The largest air liner yet built in Britain has now passed its official tests and is expected at the London air station early this week.

It has accommodation for 24 passengers in a roomy saloon replete with all the most modern arrangements for the comfort of travelers.

During its trial flights at the Royal Aircraft Establishment aerodrome at South Farnborough it carried a deadweight in ballast of 2½ tons, equivalent to the weight of 35 passengers, so that in addition to the 24 passengers it can carry three-fourths of a ton of luggage, etc.

The machine has a top speed of 100 miles an hour and will, in actual service, fly at an average speed of 90 miles an hour. This giant air liner is to be fitted with the latest wireless telephone installation, which will enable business men while flying from London to the Continent to communicate with their London offices. The machine will probably be put into service next spring.

GREAT BRITAIN.

EXTENSIBLE WING EXPERIMENT.

31 October, 1922.

The following news item is taken from The Times, London, of 31 October, 1922:

M. Maneyrol, the well-known sailplane flier, has made some interesting experiments in Villacoublay over the week end on an airplane fitted with extensible wings.

One of the most important factors which make for security in flying is the widest possible difference between the extremes of speed by which an airplane is maintained in the air. An ideal machine would be one which, while capable of a speed of 200 or 250 miles an hour, could nevertheless maintain itself in the air at a speed of 6 to 10 miles an hour. One of the means by which this end can be attained is the extension at will of the length of the wing.

Last year the engineers, Lavavasseur and Gastambibe, constructed an airplane fitted with wings, the extremities of which could be made to disappear at will, and this solution of the problem was successfully tested at Etampes. It is a new machine constructed by Bille on the same principle, but possessing qualities of greater rigidity, which M. Maneyrol has now been testing, with the best results.

The Bille machine, after flying at 170 kilometers (105.6 miles) an hour, reduced its speed to 60 kilometers (37 miles) an hour, and then to 20 kilometers (12.4 miles) an hour, before landing. The extension and reduction of the length of the wings, which were effected at will in full flight, occupied no more than six seconds. The airplane has been handed over to the technical section of the army and will be entered for the Aero Club's safety prize.

GREAT BRITAIN.

REPORTED AVIATION BASE AT GIBRALTAR.

19 October, 1922.

The following is a clipping from the French newspaper Le Matin of 19 October, 1922, giving supposed details of a very elaborate scheme for converting Gibraltar into an aviation base.

The text is translated below.

It is considered very doubtful if any such elaborate and expensive scheme is proposed:

AVIATION WILL RESTORE TO GIBRALTAR ITS STRATEGICAL IMPORTANCE.

The British are said to install there an underground port for aircraft.

MADRID, *October*.

The aviation publication Alas has just published an article which has caused a deep impression. Under the title "Aviation will restore to Gibraltar its strategical importance," the above-mentioned publication, after having recalled the British disputes as to the military value of Gibraltar, declares that the question has entered into a new phase since the transformation of the rock into a formidable underground port for aircraft has been considered.

The engineers would bore the rock in every direction, with a view to installing out of reach of enemy firing, an enormous aerial flotilla, having its gasoline and ammunition stocks as well as repair shops.

In the center of the rock there would be constructed vast armories from which tunnels would radiate in every direction; there would be several stories connected with one another by means of very large elevators. With a view to facilitating the take-off and the landing of planes, there would be installed at the end of the tunnels large rocking platforms.

Such a project would permit sheltering in the Gibraltar rock an aerial flotilla, the most important in the world, which would at all times be ready to protect the maneuvers of the squadron and to undertake offensive actions within a very wide range.

Thus Gibraltar would regain its former strategical importance.

The Correspondencia de Espana, after having reproduced this article and the plans which accompanied it, publishes a statement very recently made by General Burguete, high commissioner of the Spanish zone, relative to the utilization of aviation for dominating the Straits of Gibraltar.

With a thousand planes Spain would possess an extraordinary military and naval force.

With a thousand planes Spain, supported by aerial bases installed on both sides of the Straits, would possess one of the keys of the world.

It is supposed that it is General Burguete's intention to install these bases on the Moroccan coast, at Ceuta, and, on the other side of the Straits, at Algéciras or at Tarifa.

A new phase in the struggles which had for their object the domination over the Straits of Gibraltar, is about to commence. One can not help regretting that nothing has been done as yet to defend the one desirable solution of the painful problem called "Internationalization."

GREAT BRITAIN.

INTERNAL AIR SERVICE.

16 October, 1922.

The first internal air service in Britain, which will bring Manchester within two hours of London, will be opened by the Daimler airway in the near future.

At the same time, the Daimler air expresses between London and Rotterdam will begin to run through to Amsterdam, and passengers from Manchester will be able to fly direct to Amsterdam without changing airplanes in four one-half hours. There will be connections at the London air station to Paris, Brussels, and Cologne, the air expresses arriving at all these places within six hours of leaving Manchester. There will be a daily service in each direction between Manchester and London, the air expresses leaving Manchester in the morning and returning in the afternoon.

Ten-seater airplanes, driven by 450 horsepower Napier engines, will be used on the new service. Four of these machines are already in flying trim. A steward will be carried on each machine and refreshments will be served on the way.

The air fare from Manchester to London has been fixed at 43s.—only 1½d. above the first-class rail fare.

A big ten-seater Daimler air express flying from Paris to London on Saturday created a new record for a machine of this size by arriving over the London air station only 100 minutes after leaving Paris. Driven by a single 450 horsepower Napier engine, it averaged a speed of 150 miles an hour throughout the 250-mile flight.

GREAT BRITAIN.

AIRSHIP OPERATION DURING THE WAR.

4 October, 1922.

The work of airships during the war was not spectacular and little was divulged concerning it, but there is ample evidence that it was useful and that they fully justified their existence, particularly after the development which commenced in the early summer of 1917. As soon as it was realized that, for convoy duties especially, high speed is not essential but that the mere ability to stay out for long periods at a time is a valuable feature in aircraft, airships began to come into their own.

Their salient characteristics are the capacity for cruising at any desired speed from zero up, to the maximum of the type, and, compared with airplanes, an enormous endurance.

Flights of 14 and 15 hours were an everyday occurrence even with the little *SS/Z* type of no more than 2 tons gross lift, while, since the armistice, *N. S. 11*, with a gross lift of 10 tons, carried out a flight lasting for 101 hours, or slightly more than four days.

Altogether, airships have a record of 88,717 hours flying during the whole period of the war, during which 2,245,000 miles were covered. Including all training and experimental flying, in addition to all deaths resulting from enemy action, only 48 lives were lost. which gives an average of 46,787 miles per fatality, or, to put the same fact in another way, 0.45 death for every 1,000 hours flown.

Coastal airship *No. 2* was in commission during 1916, 1917, and 1018 for 2 years, 75 days, during which she covered 66,201 miles, or an average of 3 hours, 6 minutes flying on each day of her whole life. Coastal *No. 2* covered 38,303 miles in one year—1918—in 1,414 hours, 14 minutes, an average of 104.9 miles per day, while the *SS/Z 51* during a period of five months did even better than this by averaging 113.3 miles per day. On November 11, 1918, there were 103 airships in commission, of which 50 were rigids and 53 the *SS/zero* type, necessitating the employment of 7,114 officers and men.

GREAT BRITAIN.

NAVAL ATTACHÉ AT WASHINGTON.

17 October, 1922.

Capt. Francis L. Tottenham, C. B. E., R. N., was promoted to commander on June 30, 1914; to captain on December 31, 1918: served as flag commander in the battleship H. M. S. *Hercules* at Portsmouth from June, 1917, until his appointment to the Inter allied Naval Commission of Control, March, 1919–1921, in which capacity he acted as chief staff officer to Admiral Sir E. Charlton, president of the commission. From March, 1921, to September, 1922. Captain Tottenham served as flag captain to Rear Admiral Hon. Sir Hubert Brand, commanding the first light cruiser squadron and in command of the light cruiser H. M. S. *Delhi* at Devenport.

Captain Tottenham was appointed naval attaché at Washington, to succeed Capt. S. R. Bailey on October 4, 1922.

GREAT BRITAIN.

EMIGRATION AFFECTING EMPIRE.

18 October, 1922.

The board of trade returns of passenger traffic between the United Kingdom and places outside Europe show that the number of persons

of British nationality who left as passengers for such countries during the six months ended June, 1922, exceeded the number who arrived as passengers from those countries by 22,009. In the corresponding period of 1921 an outward balance of 61,375 was recorded, and in the first half of 1913 an outward balance of 157,779.

Grouped according to countries of destination, the movement of British subjects during the first half of 1922 shows a balance outward of 15,567 passengers to Australia and New Zealand, 14,811 passengers to British North America, and 4,565 passengers to the United States, while inward balances of 5,260 and 4,719 are recorded in the case of India (including Ceylon) and British South Africa, respectively.

British subjects leaving permanent residence in the United Kingdom to take up permanent residence in non-European countries numbered 75,234 in the first six months of 1922, as compared with 111,693 in the corresponding period of 1921.

A noticeable feature of the movement during the first six months of 1922, as compared with the corresponding period of 1921, is an increase of 6,846 in the number of British emigrants to Australia and New Zealand and decreases of 20,265 and 17,030 in the numbers to British North America and the United States, respectively. Decreases of 3,011 and 1,222 are also shown in the numbers to British South Africa and India (including Ceylon). The records of emigration of adults (persons of 12 years of age and over) show that females represented 47 per cent of the total in the six months of 1922, compared with 49 per cent in the same period of 1921.

In the traffic between the United Kingdom and Europe there was an excess inward of 10,845 passengers during the first six months of 1922, compared with inward balances of 23,281 and 97,031 in the corresponding periods of 1921 and 1923. These figures include aliens as well as British. In addition to the number of passengers traveling between the United Kingdom and the Continent by sea the Air Ministry report that 1,900 departed from and 2,209 arrived in the United Kingdom during the first six months of 1922 by air; 2,131 departures and 2,104 arrivals were reported during the corresponding period of 1921.

Continued troubles in Ireland are evidently impelling Irish people to seek more peaceful life in Canada. Government figures showing a total of 2,200 Irish settlers since the beginning of the year. more than half of whom are adult male agriculturists of good training.

JAPAN.

PRESENT SITUATION.

1 October, 1922.

Source: Reliable.

NAVAL.

The Japanese fleet in active commission in home waters consists of 4 battleships (BB), 3 battle cruisers (CC), 4 light cruisers (CL), 14 destroyers (DD), with 1 destroyer leader (DL), 9 submarines, with 1 old light cruiser (OCL) and 1 depot ship (AS). In Chinese waters are several old ships of little fighting value, and the training squadron of old armored cruisers is in South America.

Thus it is seen that Japan has but a small part of her ships in active commission. The active fleet itself does but little cruising, and even ship-handling exercises are of rather rare occurrence. At the same time the remainder of Japanese men-of-war are habitually kept in a reserve status that makes it possible to place them in active commission in a short time. Probably a month would suffice for this, or in case of strained relations not over half of that time.

Were the Japanese fleet assembled under such conditions, however, it would be far from efficient. Officers and men in an active status labor under the handicap of very limited sea experience, and when to the fleet as now constituted is added the large percentage of reserve ships manned, as they would largely have to be manned, by men from the reserve and recruits, the result would necessarily have to be a fleet handicapped for a time by great confusion, no confidence, and little training.

In war the sooner such a fleet could be attacked by a well-prepared enemy the greater would be the chances of success for the attacking fleet.

The seagoing personnel of the Japanese Navy consists of 7,143 officers and 73,300 men. These are intelligent, loyal, and zealous, and, except for the lack of actual sea experience and a deficiency in initiative, they may be rated as high as the personnel of any other navy.

The Japanese ships to be scrapped under the terms of the five-power naval treaty have had some work done on them preliminary to their disposal, such as removing guns and turrets, but there is no intention of actually disposing of such ships (except a few of negligible military value) until the exchange of ratification of the treaty takes place.

As a result of the above-mentioned treaty the Japanese naval personnel is to be reduced by 700 officers, 2,300 petty officers, and 8,000 to 10,000 men, but there is no information that this has

actually been done. Since the numbers of officers and men in the Japanese Navy are not fixed by law, an increase or decrease can be made easily without information regarding it becoming known outside of naval circles.

The naval stations of Japan are ample and efficient for all possible needs. Information regarding reserve supplies is not available, but such supplies are believed to be held in large quantities, notwithstanding the fact that the factories of Japan are so much better prepared to turn out war material than they were prior to the World War.

MILITARY.

The Japanese Army of about 17,000 officers and 250,000 men is well equipped and trained, and in case of war additional forces could be placed under arms rapidly. The army may be considered brave, loyal, zealous, and well trained.

At the present time a small force is in Siberia and Saghalien, but this force is being withdrawn prior to the last of October, except a small force in the island of Saghalien. The remainder of the army is stationed in Japan, Japanese possessions, and Manchuria, the greater part by far being in Japan proper.

ECONOMIC.

During and for a short time subsequent to the World War Japan made great strides in production and greatly increased her exports at highly profitable prices. Factories expanded enormously, and many new plants and companies were begun. Wages and rents as well as the prices of necessities and luxuries doubled and trebled as in many other countries, but easy money was a new experience for Japan, and the resulting orgy of careless and unnecessary spending has had far-reaching effects that are still very evident.

When the world-wide economic depression came, as usual in Japan the Government was called upon for assistance, which was given, and up to now there has been no thorough readjustment in Japan in finance, rents, labor, expenditures, prices, etc. The primary reasons for this is thought to be the inordinate fear on the part of the Government officials and business leaders of socialistic tendencies among the laboring classes, coupled with the iniquitous bonus system for discharged employees in Japan. In other words, both government and business circles are afraid of taking even mild steps toward readjustment, though both realize the crying necessity for such steps.

If wages are reduced and employees are discharged, a dangerous spread of socialism is feared, and the bonus system by which discharged employees are given a bonus of from one or two months to a year or more pay makes the question of financing a big cut in

employees a very serious one. Some companies operating at a loss can not finance an extensive cut in the number of their employees. They prefer to continue as they are, hoping for a favorable turn, even though they can see no real reason for such a turn except drastic cuts.

The result of the above is continued high cost of production, stagnation of commerce, particularly foreign commerce, frozen credits, inefficient labor, and general economic depression. A few concrete illustrations will be given.

A factory near Tokyo, largely owned by American capital, uses a small amount of steel which it nominally buys from a Japanese steel plant located less than half a mile away. Now it buys from the United States Steel Corporation, and, despite the import tax, freight, and insurance, the steel from America is delivered to their factory cheaper than it can be delivered by the Japanese plant half a mile away.

The management of a Japanese factory recently approached an American group with an offer to sell out. Upon inquiry it was found that production was but little below normal, but sales were practically nil, due to high cost of production and general depression. The finished product was simply being stored. The bankers for this factory would continue to advance money against the security of stock on hand, but the company could not raise money to pay the necessary bonus if employees were discharged and production decreased.

One Tokyo bank has a loan of 10,000,000 yen to one firm, the entire assets of which would not bring near that amount, yet the bank dare not call the loan, hoping by holding on to be able to collect in 5 or 10 years.

Much money is tied up in this way, and it is not surprising that short-time loans receive from 6 to 8 per cent, while long-time ones require 10 to 12 per cent.

Recently a commercial scout representing a large American manufacturing company passed through Tokyo from a visit of several months to Manchuria. He stated that, despite the natural advantages that Japanese business had in Manchuria, his company could undersell Japanese companies there and deliver articles superior to the Japanese.

During the first six months of this year imports into Japan exceeded her exports by nearly 400,000,000 yen, while Japanese gold reserve held abroad decreased by approximately 200,000,000.

The ban on the exportation of gold from Japan is still in force.

The present Government has announced as part of its policy a reduction in the cost of living, but so far results are not apparent.

The fact that Japan-America trade, both import and export, forms so large a part of Japanese foreign commerce emphasizes the economic importance to her of continued friendly relations with America.

POLITICAL.

Until recent years the major influences in Japanese politics have been the army and navy. They largely determined governmental policy, made and unmade political leaders, and laid out the paths that they, in all sincerity, believed to lead to the best interest of Japan. In latter years a third major political influence has developed, viz, big business. This influence is still on the increase, and unless checked it will soon overshadow the other two, though it will probably be many years before the influences of the army and navy cease to be of major importance.

The agitation for universal manhood suffrage and responsible parliamentary government is widespread and insistent. When it comes, as, of course, it must eventually, the entire political life of Japan will no doubt go through an extensive readjustment, the direction of which can not now be foreseen. One important feature will necessarily be the reorganization of both the army and navy, as the present organization is not compatible with responsible parliamentary government.

The present Japanese Government is headed by Admiral T. Kato as premier, and all the cabinet officers except the minister of war, a general on the active list, are members of the House of Peers. It is a nonparty Government, but the largest political party represented in the Diet, the Seiyukai, has agreed to assist this Government provided its policies are in conformity with the principles of the Seiyukai. This leaves the Government in rather a precarious position, and when the Diet meets next December there is no question but that the Kato Government will be subjected to very severe attacks, and no political effort will be spared by the opposition to cause the cabinet to fall.

It is without question the policy of the present Government to live up to the agreements reached at the Washington conference and to execute them in good faith.

The Japanese people consider the cabinet decidedly pro-American, and this will probably figure more or less prominently in the attack of the opposition. It is believed that the leaders in the Japanese cabinet, as well as many other prominent Japanese, are now sincerely convinced that continued friendly relations with America will be to the best interests of Japan. At the same time the change of heart or conviction has not permeated the consciousness of the Japanese people generally. They have for too many years been

fed on anti-American propaganda. Therefore a political attack on the present cabinet featuring the cabinet's feelings as pro-American may be popular, and possibly successful. If such a result were brought about its effect on American-Japanese relations would be bad.

Japanese sentiment toward Great Britain is decidedly less cordial than formerly. During the present Near Eastern crisis Japanese comment has been permeated alike with exultations over the success of Turkey (an Asiatic power) and the discomfiture of Great Britain.

Japanese sentiment toward China may be said to be in a state of suspension. It is realized by official Japanese that the events of the last year have made necessary a change in Japanese methods re China, but at the same time Japan has no idea of giving up any economic advantages she may think she has in China except as an extreme measure. If a stable government develops in China, it is probable that Japan will adopt friendship and cooperation as her line of approach in place of force and the "big stick" that she has used formerly. If, on the contrary, further disorders occur she is not above assisting in bringing about a condition of affairs that might seem to justify in the eyes of the world active intervention in parts of China. There is no doubt that Japan considers as the corner stone of her foreign relations the belief that "Japan has special interests in China, particularly in that part to which her possessions are contiguous" (Lansing-Ishii agreement).

As regards Siberia, Japan is keenly interested and somewhat apprehensive. She is anxious to conclude a trade agreement with the Far Eastern Republic, and would probably do the same with the Russian Soviet Government, but the latter has so far blocked the way to either agreement pending the announcement by the Japanese Government of a definite date for the evacuation of the northern half of Saghalien by the Japanese Army. Japan has stated that she will not evacuate Saghalien unless and until a settlement has been agreed upon for the massacre of Japanese at Nikolaiefsk. Therefore the Japan-Far Eastern Republic-Russia conference at Chang Chun has dissolved without result, and the future is in the lap of the gods. Meanwhile the Japanese Army is evacuating eastern Siberia and expects to complete the evacuating by the last of October, 1922. It is quite probable that the evacuation will be followed by a more or less extensive struggle between Russian whites and reds for control of Vladivostok and the maritime provinces. That this may again involve Japan is quite within the range of possibilities.

SOCIAL.

The marked increase in the scale of wages in Japan and the many large fortunes that have been made in recent years have brought

about considerable changes in the social life of Japan, just as in other countries. Extravagance and irresponsibility have increased and a spirit of unrest is widespread. The old unfailing politeness of Japanese of all classes has to a certain extent been replaced by rudeness and sullenness, not only toward foreigners but also toward one another. However, the Japanese are still a very polite people in comparison with occidentals.

Until recent years there was no such thing as Japanese social life, according to western ideas. Now there is the beginning of such social association, but it is confined almost entirely to a small part of the upper class and is based upon official position and wealth. Japanese houses being totally unsuited to social gatherings, only those Japanese who are furnished official foreign-style residences and those wealthy enough to own foreign-style residences in addition to their Japanese-style houses can participate in social activities.

The wearing of foreign-style clothing among the adults has decreased, but among the children has increased very much in all classes. The fact that Japanese-style children's clothes are more expensive than foreign-style clothes doubtless has something to do with this, but the generation now growing up will none the less be influenced in physique, manners, and tastes by the clothes worn.

The use of and fondness for foreign-style food is increasing rapidly in all walks of life. This, too, will doubtless produce a gradual change in physique.

In this connection there is general regret among intelligent Japanese that the average statue of the Japanese is much smaller than of westerners. Recently a very intelligent Japanese who had been much abroad stated in conversation that comparisons of ancient armor in Japan and England showed that centuries ago the Japanese people were larger than they are at present, while in England the English were smaller. Now, he continued, the Japanese physique is getting larger again, and he seemed to infer that the English were getting smaller, or perhaps he merely hoped so.

One social influence that is noticeably on the increase in Japan is that of Christianity. Churches, Sunday schools, missionary rooms, Young Men's Christian Associations, and Young Women's Christian Associations are without question exerting an increased influence. This has no reference to the number of professed Christians, but to the general influence of Christianity upon thought and the manifold activities of daily life. This influence is not only tolerated but is believed to be welcomed by the leaders and the upper classes generally. Naturally, if this continues, it will have a far-reaching effect on almost all phases of Japanese life.

Despite the foregoing, there is seen no tendency in Japan toward a decrease in the importance of families as opposed to individuals. The Government is still the most pronounced type of autocratic paternalism with decided militaristic qualities.

SUMMARY.

The Japanese Navy, while not in a high state of readiness for war, may quickly and secretly be placed on a war footing, and soon thereafter attain a fairly high degree of effectiveness.

The army is efficient and ready.

The economic condition is bad and will require drastic readjustment before it becomes satisfactory.

Politics, domestic and foreign, is dominated by the army, navy, and big business, with the influence of the latter on the increase.

The friendship of America is held to be of great value to Japan, but special interest in China is the cornerstone of foreign policy.

Many influences are tending to bring the social life of Japan more into accord with that of western nations, but the family and not the individual is still the unit of Japanese life.

JAPAN.

SUBMARINES.

11 November, 1922.

(The following memorandum, compiled in the Office of Naval Intelligence, gives a comparison between the United States and Japanese submarine forces according to the latest information.)

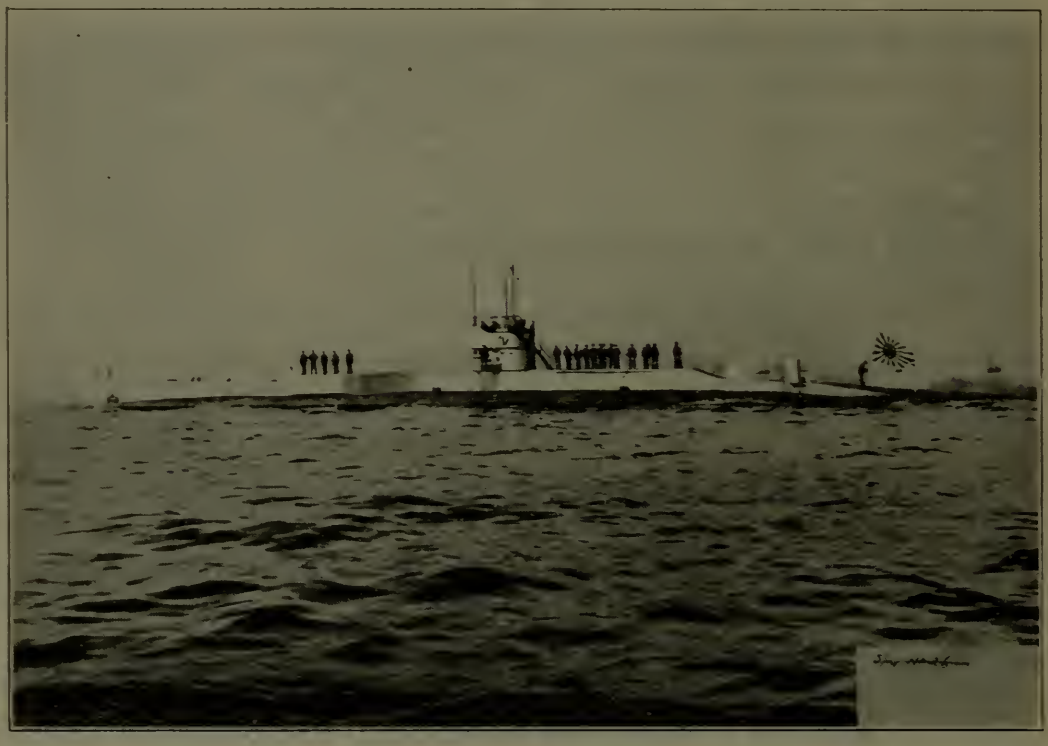
In any comparison between the Japanese and United States submarine forces total numbers are misleading, for the reason that the Japanese submarine force is made up entirely of large vessels over 800 tons displacement, and, therefore, it can only be compared with submarines of the same characteristics.

The United States has 27 submarines, second line, all of which may be considered as obsolete. Japan has 5 submarines, second line, all of which may be considered as obsolete.

The United States has 93 submarines, first line, built or building, and 6 fleet submarines, built or building. Of these, only 50 S-boats and 6 fleet submarines are comparable to the Japanese submarines that have been laid down since 1919.

Beginning with submarine *No. 19*, of 890 tons, laid down in 1919, the Japanese submarine force consists of 73 boats, of which only 8 are of less than 890 tons, giving her, therefore, 65 boats of 890 tons or larger, as compared with the United States, which has 56.

The details of Japanese submarines subsequent to *No. 63* are not yet definitely determined. The Japanese naval attaché at Washington has informed the Navy Department that *Nos. 44, 51,* and *52* are at least 1,500 tons. Admiral Kato in his recent statement, in which he gave the post-treaty program for Japan, gave the number of submarines that will be constructed under this program as 22, with a total displacement of 28,165. These 22 boats will average over 1,200 tons each, although it is not known just what the displacement of these boats will be. Hector Bywater, a well-known British authority on naval matters, in a very recent article in the Baltimore Sun, gives the following information regarding Japanese submarines. His information on Japanese light cruisers, destroyers, and other



Submarine No. 26.

vessels has always been exceedingly accurate, and, lacking information to the contrary, the following statement must until there is information to the contrary be accepted as the best information on the subject:

During the present year upward of 12 boats have been commenced, comprising 7 of 900 tons and 5 of 1,500 tons. Submarine *No. 72*, described as a 2,000-ton vessel with a cruising range of 16,000 miles, to be armed with 2 guns, 16 torpedoes, and a supply of mines, is reported to have been laid down last June. At least five other boats of this class were then contracted for, and if not already under construction will be on the stocks at an early date.

Including the series of 1,500 tonners now building, the number of "submersible cruisers"—that is, boats displacing more than 1,500 tons or more when in surface trim—which Japan has actually ordered up to the present is not less than 10, while 12 boats out of the 24 contained in the new program

will probably be of the same formidable type, giving an aggregate of 22 submarines of the very latest design. Against this fleet of underwater monsters the United States has only the 6 fleet submarines *T–1* to *T–3* and *V–1* to *V–3*, displacing 1,106 and 2,025 tons, respectively. Of the other one hundred and odd American submarines which remain on the active list all displace less than 1,000 tons on the surface, and half of them are less than 600 tons.

Another fact to be noted is the remarkable rapidity with which Japanese dockyards are now turning out submarines. For example, *No. 62*, which was laid down in November last year, was launched April 23, 1922, in a 53 per cent state of completion, and is scheduled for delivery in the coming December, complete for sea in every respect, with her full equipment and armament on board. The building period for the new 1,500-ton class as specified by the contracts is 15 months, and for the 2,000-ton boats 18 to 20 months. In America the construction of much smaller boats has hitherto occupied 30 to 36 months.

It will be noted that the United States has only six submarines of over 1,000-ton displacement, namely, the three *T's* completed and three *V's* under construction.

For some time past there have been indications that Japan was

Submarine No. 23.

preparing to build submarines of large displacement. In May, 1920, plans were received from Italy for a submarine of 2,000 tons displacement, to be equipped with two engines of a total horsepower of 10,000. The designs for these engines were made by the Ansaldo Co., of Turin. In December, 1920, it was stated in the Japanese press that the Japanese Navy has decided to build large-size submarines of about 1,500 tons displacement, with a cruising radius of at least 5,000 miles, and that a number of such submarines would be built in the next fiscal year—that is, the year beginning April 1, 1921.

The Sulzer Co., of Winterthur, Switzerland, the builders of Diesel engines, prepared plans for the Japanese for submarines as follows:

(*a*) Submarines of 12,000 horsepower, with two 5,000 and two 1,000 horsepower engines.

(*b*) Triple-screw submarines of 13,000 horsepower, with two 5,000 horsepower and one 3,000 horsepower.

The representative of the Sulzer Co. in New York stated that its company had drawn up plans for Japanese submarines of a total horsepower of 15,000 to 20,000. The Sulzer Co. at one time in the past year had 21 submarine engines under construction for the Japanese, ranging from 6,000 horsepower to 500 horsepower.

During 1920–21 about twenty 5,000-horsepower Diesel engines, identical design, were being manufactured for Japan by several firms in Germany, and in April, 1921, it was estimated that the shipment of submarine engines to Japan from Germany was sufficient to equip about 40 submarines. The engines were reported to be exported by bribery of German officials in the absence of the representatives of the Allied Control Commission.

Information from French sources was to the effect that four submarines of 1,900 tons, of Italian design, were under construction in Japan, and from another French source it was reported that Japan was building monitor submarines with a surface displacement of 4,220 tons, to be engined with German engines and to be armed with a $10\frac{1}{2}$-inch gun. Short guns of this caliber have been seen under construction.

In January, 1922, the Buenos Aires paper La Razon published a picture and description of a Japanese submarine. The description, it was stated, was obtained from the Argentine naval attaché in Japan. This vessel was stated to be of 7,500 tons displacement, 12,000 horsepower.

All of the above gives a very confusing picture as to what is actually being done in the way of constructing large submarines, but from all of the evidence it appears that Japan has contemplated for some time the construction of large submarines, and that designs were obtained from various sources, and that engines have actually been built for her for large submarines in Germany and in Switzerland. We have on the statement of her naval attaché that three of these are actually under construction, and that they are at least 1,500 tons. The announced statement of Admiral Kato shows that Japan contemplates building 22 more that will average over 1,200 tons, and if any of these are of the 900-ton type the others will be in excess of 1,200 tons. The article by Hector Bywater confirms the execution of a part of the program announced by Admiral Kato, and if his information does not refer to the ships of Admiral Kato, then it means that she has still a greater number of submarines in excess of 1,000 tons. The only confirmation of the United States naval attaché is that *No. 62* and *No. 63* and *No. 67* are over 1,000 tons, but the exact displacement is not given.

The 32 boats mentioned by Admiral Kato will, if the total figures given us by the Japanese naval attaché are correct, be *Nos. 70* to *91*, inclusive. As a final summary, it can be stated that there is official information that Japan has 28 submarines building or projected of over 1,000 tons, namely, the 3 reported by the Japanese naval attaché, *Nos. 44*, *51*, and *52*, of at least 1,500 tons; the 3 reported by our naval attaché as being in excess of 1,000 tons, *Nos. 62*, *63*, and *67;* and the 22 averaging over 1,200 tons, announced by Admiral Kato.

The Japanese have purchased submarine engines in Europe embodying the best German and Swiss practices; they are not known to have any special devices for use in submarines that are not known to the United States or Great Britain. An interesting fact in connection with the design of the most recent Japanese engines is that

Submarine No. 19.

they specified that the engines should operate with a circulating water of 100° temperature, which indicates that they expect that the boats will be called upon to operate in the Tropics, as the maximum temperature of the Japan current, which warms Japanese waters, is 83°

JAPAN.

MOVEMENT OF FLEET.

4 October, 1922.

The Japanese standing fleet arrived at Yokosuka September 30, 1922, from a cruise to the Hokkaido, during which night target practice was held near Ominato.

From Yokosuka the ships will proceed to their home yards for repairs and changes in personnel, and the fleet will probably not assemble again until after December 1, 1922, when a new fleet organization goes into effect.

According to press reports, the order of steaming of the fleet from Otaru to Ominato was: Light cruisers, destroyers, submarines, battleships, battle cruisers, airplane ship.

JAPAN.

AVIATION LABORATORY.

5 October, 1922.

The vernacular press reports that a study is being made at the Imperial University, Tokyo, of high-altitude air conditions as effects aviation.

An air-pressure testing chamber built of 2-foot concrete walls lined with 8-inch cork is reported to be used for conducting various air tests, including mental and physical effects in air equal to that of high altitude.

FRANCE.

THE NAVY.

28 October, 1922.

The loss of the battleship *France* has called public attention to the present position of the French naval power, which is declared to be comparatively lower than it has ever been since the beginning of the last century.

Leaving out of account certain units which are now out of date and are retained only on account of French naval poverty, the French Navy is reduced to 6 dreadnoughts, 5 light ex-enemy cruisers, 38 torpedo-boat destroyers, of which 10 are ex-enemy, and 41 submarines, of which 10 are ex-German. For the rest, there are 3 battleships of the *Voltaire* type (18,300 tons), 10 old armored cruisers of the *Montcalm-Michelet-Quinet* type, a dozen old torpedo-boat destroyers, and an equal number of antiquated submarines.

Moreover, coast defense against an enemy at sea is said to be nonexistent, since the old heavy batteries scattered along the coast line have a range of scarcely more than $6\frac{1}{4}$ miles, while the guns of a modern battleship carry from 20 to 25 kilometers ($12\frac{1}{2}$ to $15\frac{1}{2}$ miles). Again, the position of French naval aviation is far from satisfactory, since the greater part of the seaplanes constructed during the war are no longer serviceable, and Parliament has not yet voted the credit for their renewal.

Frenchmen are, indeed, asking themselves whether it would be possible to protect their maritime communications in the event of a

renewed conflict with Germany, and the present state of the French Navy is compared unfavorably with that of Italy. The taxpayer is therefore called upon to face the situation courageously and make the sacrifices necessary to reestablish French naval power on a satisfactory basis.

FRANCE.

QUADRIMOTOR SEAPLANE.

20 October, 1922.

Source: Reliable.

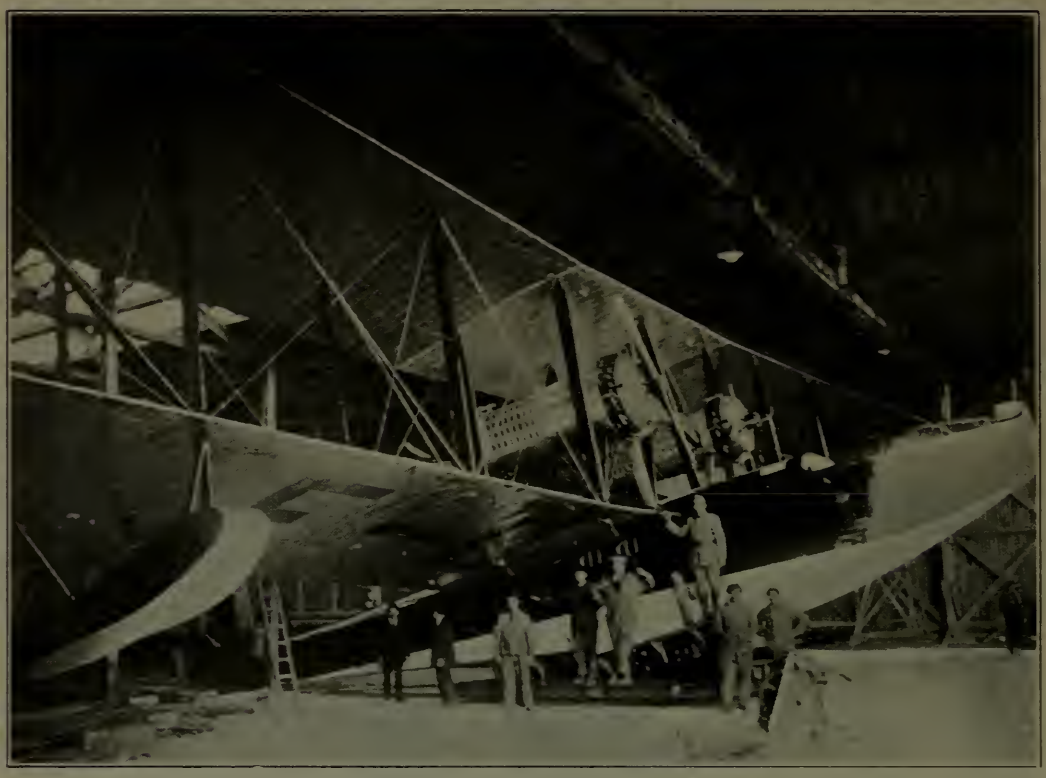
Information obtained on the occasion of a recent visit to the works at Caudebec-en-Caux, Normandy, was to the effect that 14 Latham

Passenger cabin of Hydravion quadri-moteur commercial.

quadrimotor 1,000 horsepower planes had been delivered to the French Navy, and one more would be delivered. One of these planes, supposedly the fifteenth, was seen nearing completion.

The official tests of torpedo dropping from these planes were conducted at Caudebec August 13–20, 1922. The dummy torpedo was seen; it appeared to be a 21-inch 5-meter torpedo. The torpedo is carried close along the starboard side of the fuselage and close up to the lower plane.

The accompanying photographs are of the *Hydravion* quadri-moteur commercial. This seaplane was stated to be practically the same as the naval plane except for the torpedo.



Hydravion quadri-moteur commercial.

The general characteristics for the 1,000-horsepower commercial flying boat are as follows:

SPECIFICATIONS.

Type of machines	Flying-boat biplane.
Span	105 feet.
Overall length	59.7 feet.
Maximum height	18.6 feet.
Total surface of wings	1,939.6 square feet.
Engine type and horsepower	Four Salmson, 250 horsepower.
Weight, total	15,874 pounds.
Tank capacity in gallons	352 gallons.
Tank capacity at the speed 100 miles per hour—that is to say, 500 miles	5 hours.
Tank capacity at the speed 78 miles per hour—that is to say, 624 miles	8 hours.

PERFORMANCE.

Speed low down	102 miles per hour.
Speed at 3,281 feet	100 miles per hour.
Speed at 6,562 feet	97 miles per hour.

CLIMB.

To 3,281 feet	8 minutes.
To 6.562 feet	19 minutes.
To 9,843 feet	33 minutes.

The naval plane carries the 840 kilos (1,851.9 pounds) torpedo or can carry 1,000 kilos of bombs (2,204.6 pounds).

FRANCE.

COMMENT ON ARMS TREATY.

25 October, 1922.

(The following is a translation of an editorial from the leading paper of Brest, and gives more the view of a maritime locality than is to be found in the Paris papers.)

The American press largely comments on the latest information received from its representatives in Paris, according to which they think it probable that France will not ratify the Washington disarmament treaty. The press also points out that in high official circles in the United States they do not credit such an interpretation. A high official of the United States Government made the following comment on this subject:

Actually, nothing permits us to suppose that France will abstain from ratifying the treaty. Nothing contained therein is detrimental to her interests. To the contrary, the equality of navies established between France and Italy was accepted at the conference without objection. Five powers have already signed the treaty. However, this treaty does not become effective unless all parties ratify it. The United States will not exercise any influence over France. She is at perfect liberty to d scuss the disarmament treaty as she sees fit. The heads of the American Government will, however, receive with great pleasure the news that France has ratified the Washington treaty.

We have often commented on the bad judgment of the French Government in postponing the discussion of the Washington treaty. We lead other countries to believe that we still have the intention of adhering to our building program, while at the same time we renounce any intention of replacing the lost battleship *France*.

We should have ratified with enthusiasm the accords at Washington. It limits our numbers in battleships? But why pause—as we have not the money to construct them, and of the fact that we have not much confidence in the future of the battleship.

We wish for submarines? The Washington accord leaves us that latitude. We can build them as fast as we care to—still we are not building any.

Truthfully speaking, the retard in discussing the Washington accord does France a great wrong. We appear to have something con-

cealed behind our actions, when in reality we have nothing of the sort.

FRANCE.

ANTIAIRCRAFT DEFENSE.

1 November, 1922.

(From translation of article of Ideas on Antiaircraft Defense, by G. Fontaine, Chef d'Escadron d'Artillerie, Chief of the Bureau of Antiaircraft Defense of the Army Air Service.)

1. Airplanes in order to reach, during the night, an objective at a great distance, find in space beaten path that is fixed by marks on the ground, and even navigation by compass does not entirely obviate orientation by marks along their route.

2. The routes followed by aircraft are, in general, well defined. Either airplanes follow a route parallel to general lines of the terrain, water courses, railroads, etc., or they orient themselves on characteristic points, junctions of rivers, woods, etc., in the same manner as navigators on the ocean search for signal lights. The location of these routes is made by the service of information of the antiaircraft defense, which utilizes for this purpose all information received concerning the routes used by enemy airplanes which have penetrated their territory, such as reconnaissance and bombardment aircraft.

3. The knowledge of these routes is indispensable in order to prepare upon the ground a judicious distribution of the "active means" of antiaircraft defense, cannons, machine guns, searchlights, etc. It is even more necessary for the location of the "passive means" of defense against aircraft, whose direct purpose is to obstruct these routes.

4. Numerous passive obstructions have been conceived: metallic cables raised and maintained in the air by kites: cables shot into the air from cannons (a project only): cables dropped by airplanes and maintained in the air by parachutes: metallic cables supported by balloons, etc.

5. The English utilized for the defense of London aerial nets which were arranged in the following fashion:

6. Each element of the net was composed of three balloons of 1,000 cubic meters each, supporting between them metallic cables from which were suspended small cables maintained in a vertical position by sacks of sand attached to their lower extremities. These balloons were approximately 500 yards apart. The vertical cables had a length of 350 yards. In this manner a net of 1,000 yards in length and 350 yards in height was maintained.

7. The raising of this net required about two hours, and the maneuvering of it was extremely delicate.

8. The process which seemed, up to the present time, the most practical was that of the balloons of protection which did not oppose any obstacle to aircraft except their own retaining cables. This system was used by the Italians in the defense of Venice and was very successful. It was adopted in France at the end of 1917.

9. These balloons of protection are small balloons of about 200 cubic meters whose maximum altitude is calculated at 8,200 feet, carrying a cable of 3 millimeters in diameter with a resistance to rupture of about 1,550 pounds (700 kilograms). An altitude of 11,500 feet can be obtained by doubling two of these balloons in tandem. When balloon A has obtained its maximum altitude, balloon B is attached to the end of its cable and arises in its turn, allowing the first balloon to continue its ascension.

10. The material of these balloons is the same as that used in observation balloons and can resist a wind of 44 miles per hour.

11. The balloons can not be placed too close to each other because of the danger of entangling the cables. The interval for single balloons is from 200 to 300 yards, and for tandem balloons from 400 to 500 yards.

12. Do these balloons of protection really constitute an obstacle?

13. The 3-millimeter cable seems at first glance to be too thin to be dangerous, but it has a strength of 1,550 pounds. If encountered by an airplane in full flight, it will communicate by its own inertia an appreciable shock, and if touched by the propeller it will either wrap around it or break it, infallibly. The calculation of the probability that an airplane 25 feet in width crossing a line of balloons 250 yards apart shows that there is 1 chance in 10 of running into a cable. It seems then that these balloons are a very serious obstacle.

14. Experience, however, is more conclusive than theory. We have seen from experience that in the region of Nancy from the time that certain points were defended by barrage balloons German aviators did not descend a single time below the maximum altitude of these balloons.

15. The immediate effect of barrage balloons is to detour enemy aviators from their habitual routes and force them to seek altitude, thus contributing to diminish the frequency and precision of bombardments.

16. Barrage balloons to be effective should be employed exclusively at stations of small area. One can conceive that an objective surrounded entirely by balloons, mounted in tandem, could not be subjected to bombardments except from an altitude in excess of 11,500 feet, and, therefore, has nothing to fear due to the lack of

precision of the bombardment and the dispersion of the points of impact, except from very rare and unfortunate hits.

17. On the contrary, the utilization of barrage balloons for positions of large area and for large cities in particular is a complete error. In fact, a bomber would be indeed inexperienced and foolish to arrive over a large objective at an altitude less than 16,500 feet, if, for example, his objective was Paris. Moreover, the enemy could force the employment of barrage balloons in the proximity of defensive points. It will be necessary to experiment with the effect of surprise by placing unexpectedly barrage balloons across the routes frequently traveled by enemy aircraft at points where no warning has been given of their presence and where the enemy are known to habitually fly at low altitude. A squadron flying into a barrage of these balloons arranged in groups of five, for example, would almost certainly lose most of its aircraft. This mission of surprise should be confided to particularly mobile balloon elements.

18. The employment of barrage balloons such as we have just described permits the realization of economy in the distribution of "active means" of antiaircraft defense. This is their principal utilization.

19. The distribution should, therefore, be made as follows: To armies, nearly all of antiaircraft artillery mounted on automobiles and automatic cannons for low-flying aircraft. It being understood that the troops of the line provide their own defense with their own machine guns. For the defense of sensitive points the following organizations in order of importance: For objectives of small area, bolt of barrage balloons with small machine guns in case inclement weather prevents utilization of barrage balloons; for more important objectives, antiaircraft artillery in position and searchlights for night fire. In case of need, automatic cannons, especially when low altitude attacks are feared. And finally upon the aircraft routes far from sensitive points, strong organizations of night pursuit aircraft, searchlights, and barrage balloons.

FRANCE.

DIRECT SHIPPING SERVICE BETWEEN IRELAND AND FRANCE.

14 October, 1922.

A French syndicate, with headquarters at Brest, has inaugurated a direct weekly shipping service between that port and Cork and Dublin. This service is to include both passenger and freight traffic. The first ship to arrive from France under this arrangement was the *Banba*, which reached Dublin on October 1, with cargo

and a large and influential party of interested Frenchmen on board. The arrival of the ship is hailed by the newspapers as being the opening of a new era in Ireland's relations with the world, and with France in particular. Judging from newspaper articles and discussion in commercial circles, there is quite a strong movement in French quarters looking toward the development of Irish trade with France. The traditional friendly relations between the two countries is the subject of much talk, and there is a great deal of propaganda for a closer commercial union of the two countries under the new conditions which now obtain in Ireland.

CHILE.

ARMY OFFICER'S FLIGHT TO RIO DE JANEIRO.

2 October, 1922.

The successful flight of Capt. Diego Aracena from Santiago to within a few hundred kilometers of Rio Janeiro has excited a tremendous enthusiasm and aroused the national spirit of Chile to the highest point.

It is a noteworthy feat in that it was the longest flight attempted in South America. The idea was concepted on the 23d of August, on which date the Minister of War sent for the temporary chief of the aerial service, Colonel Monreal, and stated that he wished an attempt to be made to send one or two airplanes to the centennary of Brazil.

At this time the chief of the air service was under suspension and being investigated by a congressional committee, on account of charges having been made in the Chamber of Deputies, in which it was stated that the air service of Chile was greatly disorganized, and hints were made that large sums of money had been deferred from their proper use in this service.

Undoubtedly, the criticism to which the air service of Chile has been subjected to in the Congress during the past few months affected the decision of the President to attempt to have the flight made.

The President selected Captains Aracena and Castro to make this flight, but after consultation with a number of the army officers Captain Barahona was selected in place of Captain Castro, and with him an English mechanic named Seabrock as the mechanician. The whole matter was kept very secret. There was no advertisements in the press and very few people knew that the attempt was to be made.

The flight was originally started on Friday, the 25th of August, but on account of bad weather and for other reasons it was delayed until the 29th of August, when a start was made at 8.20 a. m.

The plans called for the first landing to be made at Mendoza, in the Argentine, where an officer and some aviation mechanics had gone previously to prepare a landing and be ready to make any necessary repairs to the machines.

On landing at this place the machine of Captian Barahona was found in such a condition that it was impossible for him to continue to journey.

Captain Aracena, in his machine, continued the flight, proceeding by the way of Buenos Aires, Montevideo, and Santos, and finally terminated 15 days later in a small town called Urbatuba, in Brazil, 250 kilometers from Rio de Janerio. In making a forced landing at this place the machine was completely wrecked, although the pilot was not injured.

The Brazilian Government subsequently lent to Captain Aracena a seaplane, by which he finally landed in the harbor of Rio.

I have been informed by men who are well versed in the aviation affairs of Chile that it was due to Captain Aracena's own conceit that the machine on which he originally started did not complete the journey.

Up until the time he arrived at Santos the English mechanician, Seabrock, who originally came out with Major Scott, had accompanied him throughout the entire journey, and according to some authorities it was he who was really responsible for the success of the flight. At any event, when Captain Aracena was making his final flight he dispensed with the services of this mechanician, and promptly got into trouble and wrecked the machine. It is generally thought that his idea was that he did not wish to arrive in Rio de Janeiro with an Englishman in the machine, thinking thereby he might lose some of the credit for the success of the undertaking.

The actual distance flown amounted to 3,450 kilometers.

It is stated that the maximum elevation reached crossing the Andes was between 13,000 and 14,000 feet, and the lowest temperature encountered was 20° below zero.

This was naturally the only dangerous part of the journey. It is a feat which has only been accomplished a very few times successfully. In the past few years several aviators have met their death in attempting it.

The machines used were the De Haviland No. 9 type, with characteristics of 120 kilometers per hour and a climbing capacity up to 5,000 meters and a radius of action of 500 kilometers.

The machine used by Captain Aracena before the flight had been in the air 22 hours and 10 minutes, and its motor, a Siddeley Puma, No. 6965, had been in use 98 hours and 25 minutes.

The machine used by Captain Barahona, which gave out after the first jump from Santiago to Mendoza had, before the voyage, a record of 149 hours in the air, and its motor, No. 6630, had a record of having run 137 hours and 45 minutes.

For his success in this flight Captain Aracena has received the thanks of the Congress, been promoted to the rank of major, and given the sum of 75,000 pesos.

His mechanician, Seabrock, was given 25,000 pesos by the Government.

As has been explained above, the idea of attempting the flight was conceived by the President, more for the purpose of confounding his political adversaries than anything else. In this he has been unqualifiedly successful, as within a few days after the completion of the flight the congressional committee investigating the air service surrendered their report, which stated that the accusations made in the chamber against England and the management of the air service here were not correct and had been greatly exaggerated, and the chief of the air service was released from arrest and restored to duty.

At the present time preparations on a very extensive scale are being made to receive former Captain, now Major, Aracena with all the honors due a national hero on his return from Rio de Janeiro.

CHINA.

GENERAL CONDITIONS.

16 September, 1922.

After the fighting last spring, which resulted in the defeat of Chang Tso-lin, the Manchurian military leader, those who put their faith in the regeneration of China through representative democratic government optimistically believed that an opportunity was at last afforded for the political reunion of the country and for the peaceful reorganization of the central government along representative lines without military interference.

In the spring war Chang Tso-lin represented the established privileges of the military leaders and professional politicians of nearly all factions, including Sun Yat-sen and the southern "constitutionalists" generally. Wu Pei-fu represented the popular disapproval of all of these factions and, nominally at any rate, championed the sovereign people of China as opposed to their exploiters.

His victory over Chang Tso-lin put him in a position to dictate whatever changes and reforms he had in mind. He contented himself, however, with setting up again the central government as it had existed in 1917, the last which had enjoyed the confidence and support of all 22 Provinces. This included the recall of Li Yuan-hung to the presidency and the recall of the old parliament which had sat under Yuan Shih-kai and has never abandoned its claim as the only legal legislative body.

Having given the new government a start Wu Pei-fu withdrew from the vicinity of Peking, believing that the collapse of opposition and provincial recognition of the restored government would come automatically and pledged himself not to interfere nor to attempt to control the policies of the new administration.

It was then hoped that the recall of a formerly recognized government and the elimination of miltary influence from administrative affairs would do away with the scruples of those leaders who have opposed former administrations from *sincere* motives and would rob the insincere secessionists of the south of their *casus belli* and discredit them in the eyes of their subordinates and their military adherents. This hope has been to some extent justified.

Sun Yat-sen's independent government in the south broke down at once and after some skirmishing in Kwangtung Province Sun and his following were forced to take refuge in flight. The provincial military governors have, of course, been extremely loth to abandon the special privileges which they have acquired durng the past five or six years of independence and have made every possible excuse for withholding recognition and support, a favorite plea being that they do not believe in a highly centralized government but in provincial autonomy and that they are holding aloof until the central government recognizes the principle of provincial autonomy.

Yunnan, Kwangtung, Kweichow, and Szechuan Provinces have been holding aloof from Peking on this plea, and in the meanwhile the newly constituted government in Peking has shown itself so weak and inefficient that the provincial leaders are regaining their courage, again combining against Wu Pei-fu and, by charging Wu with interference in Peking's affairs, amounting to a dictatorial control, are providing themselves with fresh excuses for open opposition to Peking.

Chang Tso-lin in Manchuria, once assured that his broken army was not to be pursued by Wu Pei-fu's troops, has been working hard to reestablish his reputation and authority in his own territories in the first place and to prepare for a second descent upon China proper with a reorganized army in the near future. He has therefore become again the recognized leader of opposition to Wu Pei-fu's scheme

of things, and his preparations for war have given rise to many rumors of imminent conflict.

Since the formation of the new government in Peking nothing has been achieved which would do either the government itself or Wu Pei-fu credit. Parliament's sessions have been disorderly and often absurd. It has done nothing to help shape a new policy nor to win the confidence of the nation, and its sessions are now almost ignored by the Chinese press. The Provinces have given no financial support and all the energies of the cabinet have been devoted throughout the summer to a frantic search for sufficient funds to meet the local demands from government employees and teachers for back pay. The personnel of the government is in no sense objectionable, and a fair proportion of the new officials have been well chosen for their honesty and sincerity of purpose, but the lack of provincial support and the financial stringency have crippled them, creating a situation which the established military and political cliques opposed to Wu Pei-fu have used to their own advantage.

In spite of all this Wu Pei-fu's adherents and advisers still profess to be optimistic and believe that if the government can be saved from bankruptcy this winter, it will win by spring the unqualified support of all Provinces, will be in a position to undertake disbandment, and will have financial support from the Provinces. They insist that in spite of Chang Ts-o-line's preparations, the political outlook is hopeful.

The result of recent feuding in Szechuan has been the restoration of order under leaders favorable to Peking and pledged to reunion and cooperation with Peking. The present leaders in Yunnan, Kweichow, Kwangsi, Kwangtung are said to have expressed their willingness to recognize the central government as soon as they have been given authority from Peking to bring their Provinces into the fold. The cancellation of autonomy by Tang Chi-yao in Yunnan and by Chen Chiung-ming in Kwangtung would therefore give Peking at least the nominal support of the south and would leave no leaders in open defiance of Peking's authority but Chang Tso-lin, whose supremacy in Manchuria Peking hopes to undermine before his war preparations again make him dangerous. The recent defection of Tuchun Wu, of Heilungkiang, one of the Manchurian Provinces—a defection which Chang Tso-lin has been seemingly powerless to punish—has given the government high hopes of breaking Chang Tso-lin in his own bailiwick and of preventing another war inside the Great Wall.

Whether or not the government's hopes are justified by circumstances it is too early to judge. The discussion of politics has been limited for many months to those immediately interested in them,

namely the military leaders and the officials actually in office. The public seems indifferent; and this indifference appears to be traceable to a widespread conviction that representative democracy was not and is not suited to China and that no amount of political juggling and no change of personnel will evolve a workable system of government while the model introduced in 1911–12 is adhered to.

Republicanism is everywhere voted a failure. It is now being pointed out that it is an alien institution imposed upon China without consideration of or adaptation to China's native traditions of government. It is also pointed out that China can not adapt herself to republicanism within any reasonable period because of widespread illiteracy, the lack of good newspapers, and the paucity of good communications. While this conviction grows and spreads, there is naturally less and less interest taken by thinking Chinese in the troubles or prospects of the government.

The intellectuals, scholars, teachers, and students, who form a very large and influential class, have ceased to be interested altogether since the revived Parliament has shown no tendency to undertake serious reform or to shape a policy for the Government. The interest of these intellectuals has been diverted to all manner of radical theories of government, and there now exists in every educational center from Peking to Canton growing societies of socialists, anarchists, nihilists, communists, and what not, reflecting every phase of revolutionary thought known to the Occident.

The recent arrival of A. A. Joffe in China as plenipotentiary of the Soviet Government has given radical thought in Peking a new impetus, and the enthusiastic welcome given this notorious Bolshevik agent by the intellectuals has seriously alarmed all foreigners resident in China. Convinced that imported republicanism is a misfit and that China can not afford to wait until the people have slowly adapted themselves to this misfit, the intellectuals have been searching in their minds for an alternative form of government, and Bolshevik propaganda has made a deep impression.

In the meanwhile both Wu and Chang are preparing for a fight, which will only be precipitated by Chang attempting to invade Chihli once more. The arms embargo is being more openly violated than ever, and Wu and Chang are finding no trouble in purchasing arms and ammunitions for which they have money to pay for. It is very difficult to ascertain the true conditions of the military camps of these opposite factions, for practically all the news agencies in China, both foreign and Chinese, are subsidized, and besides the majority of foreign correspondents in China have no funds to travel, and generally cable home ordinary tea-house gossip emanating from Peking governmental yamens. The frequent rumor that Wu's power

is on the wane is false, and that he has broken with Feng, the Christian general, is also incorrect. There is every indication that Chang will again attempt to invade China proper and that he will get a worse "licking" than he received last time.

Because it enjoys nothing more than the nominal support of the Provinces and can not insist upon a share of any of the taxes collected by the provincial leaders, and because every tangible security has already been pawned by previous administrations, the new government in Peking is in serious financial straits. It is the first Chinese Government to admit the possibility of bankruptcy and to point out in its appeals for help the dangers of a financial failure.

The cabinet ministers, arguing that the political prospects are bright and that within a reasonable time Peking will be enjoying regular remittances from the Provinces, appeal to occidental bankers for help, and point out that if the Occident fails to come to China's assistance now they will be playing into Japan's hands. They say that Japan has failed to disrupt China and gain control of her affairs through interference in her military and political affairs, and that she is now looking forward to China's financial collapse as an opportunity and an excuse for interference and control.

With this preface, the Government is making informal and indirect appeals for a series of loans, something like $2,000,000 monthly for six months or a year, pending reunion of the country, disbandment of troops, and the normal release of provincial funds for administrative purposes. Lacking such support, the prospects of any Chinese government surviving the winter, during which a number of foreign obligations fall due, are slim indeed, and the cabinet predicts that if no help is forthcoming the central authority will simply fade away, making place for foreign financial control, which Japan, advancing her usual claim of "geographical propinquity" and special interests, will monopolize to the great detriment of all occidental interests.

CHINA.

REPORTED GERMAN-RUSSO-CHINESE ALLIANCE.

9 September, 1922.

A sensation has been caused by the discovery of plans for the conclusion of a Chino-Russo-German alliance of a Bolshevik character. The papers were left behind in a safe by Sun Yat Sen's vice minister for finance when he fled from Canton recently, although he had been given strict orders to burn them by Sun Yat Sen.

It is disclosed that Sun Yat Sen was working in Berlin through a Chinese emissary who secured the cooperation of Admiral von Hintze, who was at one time German minister in Peking and is now minister at Moscow. According to this emissary, von Hintze had decided to give up all other political interests in order to concentrate wholly on this project, for the carrying out of which he wanted the German Government to send him to China.

The correspondence shows that Sun Yat Sen had been engaged on this scheme as recently as last March.

GERMANY.

TRACKLESS TORPEDO.

4 November, 1922.

Source: Reliable.

It has been learned from a reliable German source that the most vital need of any nation using submarines is the development of the trackless torpedo, and further, a device for permitting torpedoes to be discharged from submerged tubes without leaving air bubbles. The first of these problems was solved by the Germans in the spring of 1918, but the development came too late to permit large orders to be filled and their extensive use on the front. The second problem was in process of development but no complete device which entirely solved the problem had been developed up to the close of the war.

The absence of these two devices made submarine warfare, except for night attacks, a very hazardous and uncertain operation; on the other hand, submarines possessing trackless torpedoes and submerged tubes capable of discharging the torpedoes without accompanying air bubbles could attack at all times with extremely favorable chances of success.

GERMANY.

SUBMARINE WARFARE FROM 1914–1918.

4 November, 1922.

Source: Reliable.

Proceeding from the German Bay out into the North Sea and the Baltic, the submarine warfare increased in scope commensurate with the growth and extension of the other military measures. The North Sea submarines operated temporarily from Flanders even at the close of 1914 until regular submarine operations were begun from the Flanders base in March, 1915; this continued until the evacuation of Flanders at the end of September, 1918.

Kiel and Dantzig were the submarine bases in the Baltic. After the fall of Libau in the beginning of May, 1915, this harbor became the main base for the submarine operations in the Baltic. The submarine activities in the Mediterranean were begun in May, 1915. Pola and Cattaro were the main bases. Auxiliary bases on the coast of Asia Minor began to be important already in 1915. In August, 1915, the submarine activities extended from the Mediterranean over into the sea of Marmora and the Black Sea.

The submarine warfare in the Baltic and in the Black Sea had really only a local importance and relationship with the main purpose of the actual warfare itself. The sinking of the Russian cruiser *Pallada* by the *U–26*, under Lieut. Freiherr von Berchkeim, was the first of our series of submarine successes in the Baltic. (October 11, 1914.)

Even though at this time the submarine bases covered an extraordinary area, this area was continually enlarged owing to the continuous increase in the radius of action of the ships. In September, 1916, the *U–53* was the first war submarine to reach America.

The first submarine operations began at about the same time in the northern Arctic; in November, 1916, the area down as far as the Canary Islands was operated by three submarines, and from the end of 1917 on the submarine cruisers.operated regularly far to the south and west in the Atlantic Ocean. Three years have already passed since the last submarine torpedo reached its goal, and the recollection of the extensive area that we controlled with our submarines at that time sounds almost like a fairy tale when we consider our present powerlessness.

An attempt will be made in the following review to show in a limited way how the submarine rapidly grew from such small beginnings at the beginning of the war to such great performances; how it developed and how it came into conflict with politics which resulted so tragically in depriving Germany of the possibility of such a success as would have enabled us to have gained a favorable peace, worthy of the deeds of our submarine heroes. All the various other things which, outside of the baleful political restrictions of the submarine command, combined to exert their unfavorable influence on the submarine warfare will be discussed in the following article to serve as a lesson for the future.

It should be noted in the beginning that the prevalent conception of the expression "submarine warfare" is the employment of our submarines against merchant ships. However, for a historical discussion of the subject, this is insufficient; all phases of our submarine activities must be taken into consideration.

When our 18 submarines proceeded to the North Sea at the end of July, 1914, no one thought of operations against merchant ships. It

was only hoped to reach the enemy as soon as possible by general cooperation with the high seas fleet. The maneuvers in May, 1914, had demonstrated that such combined activities were rich in promise of success, and that in this way we could attain a balance of power with a superior enemy. Before the war, the question of how many submarines would be required for a really effective submarine cruiser war with England was often discussed, and Lieutenant Blum, one of the especially capable officers in the technical side of our submarine development, estimated that 200 would be necessary. He may have been correct in this, as we didn't use many more than 150 ships at the front during the entire war and came very close to success. However, nothing was done as regards construction and development of the ships during the period before the war as a result of these general considerations. On account of the restraint imposed on the fleet right from the very beginning of the war, there was temporarily no cooperation between the fleet and the submarines. When it became evident that the enemy was not inclined to penetrate into the German Bay except with submarines, the ships were sent out for independent operations against the enemy warships. This method of operation, along with other activities to be mentioned later on, lasted until February 18, 1915. The principal results of these undertakings were the sinking of the *Pathfinder* by Lieutenant Herwing with the *U–21* on September 5 at the Firth of Forth (the first submarine victory of history); the sinking of the *Hogue*, *Aboukir*, and *Cressy* near the mass fireship on September 22; the sinking of the *Hawke* on October 19 by the *U–9* (Weddigen); the sinking of the English submarine *E–3* at the mouth of the Ems, and the airplane scout leader *Hermes* not far from Calais on October 31 by Lieutenant Wegener, of the *U–27;* the destruction of the gunboat *Niger* at Deal on November 12, 1914, by Lieutenant Forstmann on the *U–12;* and finally the sinking of the English line ship *Formidable* during the night of New Year's 1914–15 on the south coast of England by Lieutenant Schneider of the *U–24*. Apart from these sinkings, other remarkable trips must be mentioned during this first period of the war, which paved the way for subsequent successful operations: The first Dover-Calais trip by the *U–18* (Lieutenant von Hennig), the penetration of this ship into the bay of Scapa Flow; the first trip around England-Ireland by the *U–20* under Lieutenant Dröscher; the penetration of the *U–16* (Lieutenant Commander Hansen) into the harbor of Lerwick on the Shetland Islands, as well as the first operations from a Flanders base (Zeebrugge, Ostend) by the *U–5* (Lemmer), *U–8* (Stoss), *U–11* (Suchede), and lastly the *U–12* (Forstmann), and the *U–24* (Schneider). So splendid as these results were in themselves, yet they required a great deal of

preparation and many trips were necessary before the final success was attained.

In all these independent operations of the ships against enemy warships there was no means of forcing the enemy forces out to the submarines, and the slight underwater and surface speed of the latter made it impossible in many instances for them to approach the enemy ships close enough to fire, even when the latter were sighted. Therefore the submarines involuntarily sought to find some ways and means for more successful operations. They endeavored in the first place to bring about a closer cooperation with the fleet, and this was at times attained. In the middle of August the cruisers *Strassburg* and *Stralsund* advanced in the Hoofden and took two submarines along with them, but unfortunately the latter had no opportunity for action, as the cruisers only came in contact with the enemy destroyers at great distances. When the high seas fleet undertook their first offensive on November 3, intending the bombardment of the English coast near Yarmouth, the available submarines were posted in positions which would enable them to give ample warning of the presence of enemy forces, or form a back screen in case of necessity. As the bombarding German cruisers did not encounter any heavy enemy forces, the submarines had nothing to do. In the bombardment of Scarborough and Hartlepool on December 16, 1914, the *U–27*, under the command of Lieutenant Weggener, carefully reconnoitered the area of operations twice along the coast and ascertained the districts which were free of mines, so that the bombarding cruisers could advance. The submarines took no further part in this operation; they were engaged in other individual operations. It was just such an operation as this that caused Lord Jellicoe to express his surprise that the submarines were not also employed in order to lay a trap for the enemy such as subsequently really happened in our case on August 19, 1916. If the submarines had been used for scouting purposes on this occasion as on August 19, 1916, we would probably have learned in time that the English squadron of line ships was in such a position with relation to our own battle cruisers and main fleet that by advancing the latter out a little farther toward the west the destruction of the English squadron would probably have been sealed. That such an event would have had a material influence on the further course of the naval war is perfectly clear.

In the advance of the battle cruisers *Seydlitz*, *Moltke*, *Derfflinger*, and the armored cruiser *Blucher* with the accompanying small cruisers and torpedo boat flotillas to the Dogger Bank, January 24, 1915, a cooperation on the part of the submarines would have been very important, as the undertaking itself was carried out without the assistance of line-ship groups. Four submarines were standing ready at the mouth of the Ems on the afternoon of the 23d, and

two were waiting in Helgoland, in order to be ready to join our battle cruisers the same day. Then on the 24th they could have been used during the battle, and especially after same, against the retreating disabled English ships, some of which were being towed. When Admiral Hipper's signal regarding the sighting of enemy forces arrived on the morning of January 24, the commander of the submarine flotillas at the Ems and Helgoland, immediately sent out the available submarines to the cruisers which, in combat with superior English forces, were returning to the German Bay. But it was too late; the enemy broke off the battle before, according to his own statements, the German submarine and mine area was reached. Thus this day also failed to bring to the submarines the longed-for opportunity of encountering the large battleships of the enemy.

As this use of the ships brought no real success, the idea of using them against enemy commerce came to the fore rather early. Even before Weddigen's great success against the large battleships, the matter as to how the submarines could most seriously strike England's commerce had been discussed with the commander of the submarines, Lieut. Commander Bauer, in Wilhelmshaven. But no agreement could be reached as to how such an operation could best be carried out. Before the outbreak of the war the English writer had described in a brochure how a small country with only seven submarines could force England to peace. This idea of Conan Doyle presented the matter as much too easy, but even some leading personalities in our own country (probably influenced by Doyle's idea) showed a remarkable optimism in this regard. Before the war no especial preparations were made for the employment of the submarines in warfare against merchantmen. The idea originated from an exposé worked out at the "front" by the commander of the II Squadron, and in November, 1914, Rear Admiral von Tirpitz "sounded out" the American newspaper correspondent, Wiegand, as to America's probable stand toward a commercial warfare on the part of Germany. In this Tirpitz endeavored in all good faith to clarify the political phase of a submarine commercial war. Naturally the interview served as the announcement of an impending military operation, and to that extent had disadvantageous results in that it enabled England to take defensive measures. The thought of a submarine commercial war became ever more and more popular, and on the 20th of October, 1914, Lieutenant Feldkirchner of the *U–17* sank the English steamer *Glytra* not far from the Norwegian coast according to the recognized international principles of cruiser warfare. Other sinkings followed quickly, and up to the time of the formal declaration of the submarine blockade,

on February 18, 1915, approximately 20,000 tons had already been sunk. These were all individual operations that could have no really decisive influence; but they impressed the enemy more and more with the necessity of methodical development of defensive measures.

The declaration of the submarine commercial warfare on February 18, 1915 (usually called the submarine blockade), opened the second period of the submarine warfare. Whether or not this undertaking was too previous and ill timed has been the subject of much discussion. Tirpitz himself was not in accord therewith. There was also much diversity of opinion at the submarine "front" as to whether or not we were strong enough for such an operation. The actual blockade could only be effected from the North Sea bases by a number of boats not exceeding 25 up to October, 1915, at which time a sudden end was brought to the submarine blockade. In February, 1915, there were also eight petroleum ships on hand, the military value of which, as is well known, was very slight. Also there were only a very few boats which were equipped with guns. The declaration in itself was fairly sharp and at the beginning did not differ much from the principles of an intensified submarine warfare. But even before the actual activities of the submarine began the greater part of the sting had been taken out of the declaration. Even before the end of February a great many changes had been made relative to the protection of neutrals, with special stress laid on the Italian and American flags. In the case of the Scandinavians, up to the end of March the acknowledged indication for the traffic between the Scandinavian countries and England was a white strip. Further limitations and restrictions resulted from certain definite sinkings, but these will be discussed later.

During the period of the submarine blockade (up to October, 1915) 11 submarines had been destroyed. The boats had to get accustomed to the new work and learn from experience the danger threatening them; for instance, misuse of the neutral flag, hidden guns on apparently peaceful ships, cooperation between enemy submarines and enemy merchantmen. The most important of the defensive measures were not to submerge or emerge at firing distance from steamers, etc., which were likely to have good artillery on board; not to stop after sinking a vessel, so that any enemy submarines which were about would have difficulty in attacking; a timely change in the area of operation after a successful undertaking. The practice of taking along the officers of merchant vessels as military pilots proved very successful, as they had an especially good knowledge of the neutral and enemy shipping. After these pilots had gained war experience with tried submarine commanders they were admirably suited later on to act as advisers for commanders newly

assigned to duty at the front. It was also found very satisfactory to have valuable radio personnel on board, who did very excellent service in deciphering the enemy's wireless messages. Very often by this means the boats had timely warning of the enemy measures planned against them. An especially satisfactory method of insuring a perfect operation of the boats was very careful practice or "breaking in" beforehand; this was the best way of discovering any deficiencies in material. The responsible flotilla commanders worked continually to remove the troublesome and treacherous oil and petroleum tracks.

The principal district in the battle against the enemy commerce was that territory of the English Channel at the exit of the Irish Sea, the west coast of France, and the approaches to these districts from the Atlantic Ocean. The shortest route to this territory was through the Straits of Dover. At that time (the beginning of 1915) the large North Sea submarines passed through the straits quite unhindered. It was in April first that a net blockade was encountered there, whereupon the large submarines generally took the northern route around England. In May, 1915, the Mediterranean was added to the field of operations and the Black Sea followed shortly after. March 29 was the real birthday of the Flanders submarine flotilla, which consisted of the small "B" and "C" submarines, partially dispatched to Brugge by rail and partially by sea. The B submarines carried torpedoes, and the C submarines carried mines. Up to October, 1915, the flotilla increased to 16 ships, and during this time only two boats were lost. These small boats operated principally in the Hoofden, where they were very successful in disturbing the traffic between England and Holland. The mine boats carried one cargo of mines after the other to the mouth of the Thames. These operations were especially unexpected to the enemy. The B submarines first passed through the Straits of Dover at the end of June, and the C submarines in August; the latter were especially successful in laying mines outside Boulogne. Lieutenant Steinbrink and Lieutenant Pustkucken made an especially notable record at this time. It was really astounding what they were able to do with their small boats with only 60-horsepower engines. The Flanders district became in 1915 a veritable "high school for submarine art."

At this period the submarine activities extended to the Mediterranean. Here it was not the commercial warfare that was in mind, but an effort to get assistance to the Dardanelles, which were being so heavily bombarded by the English and allied ships. The *U–21* under Hersing's command was chosen for this maiden voyage. The ship went to sea on April 25, proceeding north of the Orkney Islands. On the Spanish coast it had the opportunity of replenishing its fuel

supply, but the very sad discovery was soon made that the oil was useless. Hersing was then faced by the difficult problem as to whether he should turn round or continue with the task in hand. He stuck to his duty and reached Cattaro on May 13 with still one-half ton of oil. The Straits of Gibraltar were passed in the early morning without submerging while the English destroyers on guard had already left for the north to change the watch. Seven days after his arrival Hersing left Cattaro and steered through the Straits of Cerigo and the Aegean labyrinth to the Dardanelles. On May 25 he bagged the English line ship *Triumph* before Ari Burnu, and early in the morning of May 27 the English line ship *Majestic* before Seddul Bar. He entered the Dardanelles on June 5 and was stormily greeted in Constantinople as the savior. The submarine activities in the Mediterranean were also initiated with small boats besides the *U–21*. These small boats were sent by rail to Pola and were there put together under the direction of a special staff. There were six small torpedo submarines and four small mine submarines of similar construction as the small Flanders boats already mentioned. Three small torpedo submarines had already preceded Hersing to the Dardanelles, but did not succeed in attaining any important success.

In contrast to the Hersing operations, the five large submarines that proceeded to the Mediterranean up to October, 1915, opened, in effect, a new commercial warfare immediately. A short sketch of the submarine activities in the Mediterranean up to the close of the war is permissible in this short résumé, as the activities of the boats there from 1915 up to the end of the war underwent no notable alterations, contrary to the other theaters of war; here the commercial warfare was carried on without cessation. Even in the summer of 1915 a sinking record of 50,000 tons was no rare thing. But then the best boats had been sent there under excellent commanders, such as Forstmann, Kophammel, and Valentiner, and the conditions existing in that territory soon proved extraordinarily favorable. It was easy to find the path of the steamers; the weather conditions and safety measures were significantly better here than in the North Sea; and there was practically no opposition on the part of the enemy. There were simply not so many small ships suitable for chasing the submarines in order to safeguard immediately the commercial highways in the Mediterranean, such as had been organized in the Dover Channel and on the English coast from 1915. It was unfortunate that after the cessation of the commercial warfare in the North Sea more large submarines were not dispatched immediately to the Mediterranean. (This will be discussed later in detail.) It was only in 1916, as the commercial warfare in the North Sea had been stopped for the second time, that four other

large torpedo submarines and one mine boat left for the Mediterranean and shortly after that six improved small torpedo submarines. It was also an error that a large ship, such as the *U–33*, was allowed to operate for a year in the Black Sea and the *U–38* from May until August, 1916, where, outside of the successful bombardment of several enemy coast fortifications, only four steamers, four sailing vessels, and two fishing cutters were sunk. In the same period of time at least ten times this amount could have been sunk in the Mediterranean. The small boats would have proved amply sufficient for the work in the Black Sea.

There was one circumstance which was very unfortunate. When we started the submarine warfare in the Mediterranean we found an Austrian shipyard at Pola and a repair ship at Cattaro. We merely added German personnel and material to these two plants in order to increase their efficiency, but unfortunately did not undertake to enlarge or extend them, such as was done by the very energetic commander, Bartenbach, at Brugge and Ostend in Flanders. The result was that at the climax of the submarine activities in the Mediterranean at the end of 1916 and the beginning of 1917 it took longer and longer to repair the boats. In 1918 this began to be really serious. In the beginning of 1918 the chief of the submarine division took energetic steps and ordered extensive improvements and enlargements to Pola and Cattaro as submarine bases. The repair shops, etc., in Trieste and Fiume were also enlarged and increased in efficiency through proper measures. As a result of the Austrian smash up these measures were unfortunately never entirely carried out. It was tragic that we never succeeded in getting hold of Valona; the passage through the Otranto Narrows would have then been considerably easier.

The commercial war in the Mediterranean sank approximately 5,000,000 tons of enemy shipping. This figure has also been supported by subsequent historical investigation. Certain submarine commanders performed actually gigantic feats. Lieutenant von Arnauld de la Periere sank approximately 420,000 tons with the *U–53* up to March 13, 1918, when the boat had to lay up for extensive repairs and von Arnauld returned home to take command of a submarine cruiser.

Among the successful commanders of the smaller boats, Lieutenants Steinbauer, von Mellenthin, and Marschall should be especially mentioned. The command of the submarines in the Mediterranean, from November, 1915, to June, 1917, under Commander Kophamel and from then on to the end of the war under Commodore Püllen, was very successful owing to the favorable circumstances existing. The tactical possibilities were always clearly gauged so that in

April, 1916, it was possible to continue the submarine war successfully, according to prize regulations. Only 17 submarine were sunk by the enemy in the Mediterranean during the entire course of the war. The month of May, 1918, was the most disastrous, as we lost five submarines in that month alone. At the beginning of 1918 England had taken energetic antisubmarine defensive measures in the Mediterranean and had taken over the guarding of the Otranto Straits from the Italians, who had previously been intrusted with it, and only then did it become really effective.

Besides the actual commercial warfare in the Mediterranean, bombardments of various coastal fortifications and the transport trips of the submarines also played a great rôle. A part of the latter were destined for Constantinople when the way through Rumania was not yet thoroughly open for us, and a part went from Pola and Cattaro to northern Africa, where the native troops under Turkish command were in battle with the Italians. These were supplied in this way with military material.

The small mine boats were principally used for such transport trips. When opportunity arose the large torpedo submarines were also used, which unfortunately deflected these from their main work, the commercial warfare. Besides Hersing's successes against the English line ships *Triumph* and *Majestic*, which have been already mentioned, the following warships were also sunk:

June 10, 1915, the Italian submarine *Medusa*.

July 7, 1915, the Italian armored cruiser *Amalfi*. (Both sunk by a small submarine.)

November 5, 1915, the English submarine *E–20* by the submarine *UB–14* (Lieutenant von Heimburg) in the Sea of Marmora.

February 8, 1916, the French armored cruiser *Admiral Charnee* by the *U–21* (Hersing) on the Syrian coast.

February 19, 1916, the English convoy cruiser *Primula* east of Malta by the *U–35* (Lieutenant von Arnauld).

April 28, 1916, the English line ship *Russell*, the sloop *Nasturtium*, and the armed yacht *Regusa* were sunk by mines at Valetta, Malta, which had been laid the day before by Lieutenant Siehs on the *U–73*.

December 27, 1916, the French line ship *Gaulois* at Cape Malcas by the *UB–47* (Lieutenant Steinbauer) in spite of protection by fishing steamers and small cruisers.

January 9, 1917, the English line ship *Cornwallis* east of Malta by the *U–32* (Lieutenant Hartwig).

March 19, 1917, the French line ship *Danton* by the *U–64* (Lieutenant Morath).

December 14, 1917, the French armored cruiser *Shateauremault* by the *UC–38* (Lieutenant Wondland), in which operation the latter was also sunk.

Besides all these there were also approximately 42 dozen small war vessels and convoy ships.

On the way to the Mediterranean via the Canary Islands Lieutenant Walther sunk the French line ship *Suffren* not far from the Spanish coast on November 26, 1916. Among the submarines which were obliged to leave the Mediterranean as a result of the Austrian crash and return to Germany the *UB–50*, under the command of Lieutenant Kukat, sunk the English line ship *Brittania* on November 9, 1918, off Cape Trafalgar. This was the last naval operation in the war, and was performed by the weapon which outlasted so brilliantly the last of our naval forces. There were still about a dozen smaller war vessels of various types which were sunk in the Mediterranean, but which can not be taken up in detail in this short review. In February the submarines took an important part in combatting the revolt of the seamen in Cattaro (*U–35*). Ten partially large and partially small boats had to be blown up in the evacuation of Pola and Cattaro because there was no longer time to finish them ready for leaving.

We will now return to the German theaters of war, which we left at the time of the dispatch of the *U–21* to the Mediterranean in April, 1915.

The period of the submarine blockade up to October, 1915, held a great quantity of splendid performances, but also a number of losses. It was not Weddigen's lot to make more than one trip in the commercial war. At the beginning of March he passed from the Ems through the Straits of Dover with the *U–29*. He stopped at Ostende for a short time. Soon after this the English reported great successes by Weddigen in the commercial warfare; then came silence. This started all sorts of reports of how he had been caught; there was a suspicion of some trickery on the part of the enemy through the use of a neutral flag. Later on came reports that the *U–29* had been destroyed during an attack on the English fleet. The veil of mystery was only finally lifted by Admiral Jellicoe in his book, "The Grand Fleet 1914 to 16." According to his account, Weddigen did not return through the channel but around the north of England, and met the English fleet on March 18 between Peterhead and Norway. Weddigen apparently failed in this attack on account of the fact that he was forced to attack with the after tubes through a lack of torpedoes, and in so doing his periscope was sighted by the *Dreadnought*. This ship succeeded in ramming the *U–29* and sinking her. Whether the ships *U–27* to *U–30* were in some way un-

manageable when submerged, and this fact was responsible for the loss, it is impossible for us to judge. In Weddigen we lost a commander who had been a pioneer in every kind of practical submarine activity and whose sharp intelligence and clear judgment would have been of inestimable value to us during the further course of the war in the consideration and weighing of tactical and strategical possibilities.

After 90,000 tons of enemy shipping had been sunk in the month of March, 1915, and 40,000 tons in April, an incident occurred in May which was to open the tragic chapter of political entanglement from which the submarine warfare could not succeed in extricating itself up to the time of the American declaration of war.

This was the sinking on May 7 of the *Lusitania* by Lieutenant Schwieger off the Irish coast near the old Head of Kinsale. The commander of the submarine had no other knowledge than that, according to his official lists and tables, the *Lusitania* was an auxiliary cruiser, engaged, furthermore, in carrying ammunition from America to England. Schwieger was further confirmed in this conviction by the fact that even before he started out it was known that Count Bernstorff, the German ambassador in Washington, had warned the American public from using the *Lusitania* as a passenger ship. An extensive interchange of notes lasting for many months followed the sinking. Our politics acceded one point after another, and the immediate result of all this was the order of June 6, 1915, by which the submarines from this date on were forbidden to sink any more large passenger steamers, even though belonging to the enemy. Outside of this, the commercial warfare followed its regular course.

The especially remarkable trips that stand out preeminently were that of the *U–35* (Lieutenant Commander Hophamel) in June to the western coast of Great Britain when 14 vessels were sunk, representing a total tonnage of 24,000; that of the *U–39*, under Lieut. Forstmann, in July with a total record of 14 vessels (approximately 36,000 tons) between the Scilly Islands and Quessant; and the record trip of this chapter of the war, that of the *U–35* (Lieut. Valentiner Max), which sank 22 freight steamers, 5 fishing steamers, and 3 sailing vessels, amounting to a total tonnage of 70,000 tons, in August in the St. George Channel, the Bristol Channel, and at Quessant.

The noted *Baralong* case occurred in August, which was indirectly a result of the precautionary measures in connection with American vessels. The commander of the *U–77*, who had especially distinguished himself during the first months of the war, lost his life at this time.

The sinking of the *Arabic* by Lieut. Schneider on August 19, 1915, reopened the diplomatic entanglement which was initiated by the sinking of the *Lusitania*. After Schneider had destroyed a benzol factory at Harrington in the northwestern portion of the Irish Sea, he was fired on by a large English steamer on the 18th of August, without, fortunately, any damage resulting. On August 19, 48 sea miles southwest of Kinsale Head, he sank the steamer *Arabic*, as he scented trouble from her similar to his experience of the 18th, since the steamer turned in his direction at full speed as he, unsubmerged, was in the act of sinking another steamer. It was only after the return of the *U–24* that it was ascertained that the steamer in question was the *Arabic*, of the White Star Line, which that morning had left Liverpool for New York with 170 passengers and a crew of 250 men. There was also English gold on board to the value of 8,000,000 marks, as well as several American citizens, three of whom were said to have been drowned. The English outbursts of anger, therefore, succeeded in finding a most willing ear on the other side of the Atlantic for their expressions of indignation.

Count Bernstorff, the German Ambassador in America, declared, without being officially authorized to do so, that "the submarine commander would be punished, as he had overstepped his instructions." The *Arabic* incident was the subject of the most heated discussions at general headquarters. Tirpitz and the chief of the admiralty staff were most energetic in their opinion that the submarine warfare should not be given up for the sake of America, while the prime minister, Bethmann-Hollweg, seconded the opinion of the chief of the naval cabinet, Admiral von Müller, that America should be assured that the *Lusitania* incident, which was still pending despite the exchange of notes, should be turned over to a court of arbitration and that the submarine commanders should have distinct orders not to sink a passenger steamer without previous warning and the rescuing of the passengers. Although the Kaiser, on August 26, had given his decision in accordance with the point of view held by von Tirpitz and Bachmann, the prime minister brought about a new decision of the Kaiser, in accordance with his point of view. The fateful dispatch was sent to America. Bachmann had to resign his post and the retired Admiral von Holtzendorff became his successor. Admiral von Tirpitz's relations with the Kaiser were further impaired. It was felt very distinctly at the submarine "front" that the submarine war in the North Sea, even in its restricted form, was slowly but surely coming to an end, especially as the boat *U–39* was ordered to the Mediterranean on the 16th of August after the sinking of the boats. A definite order for the cessation of the commercial warfare in the North Sea did not reach the front immediately. On August 30 the order was simply given

that until further notice no small passenger steamers were to be sunk without warning and the saving of the crew. This order was absolutely impossible to carry out. How was a submarine commander to distinguish a passenger steamer from a freight steamer through the periscope of his ship? The chief of the fleet, Admiral von Pohl, who had been appointed to this position as a result of the events of January 24, 1915, now protested against this order in the interest of the submarine commanders. The Kaiser turned down the protest of the chief of the fleet. On September 20, 1915, the commander of the submarines in the North Sea received imperial orders to cease immediately all submarine commercial warfare on the west coasts of Great Britain and in the canal. As a result of these disputes, the efforts of the prime minister and the chief of the naval cabinet to come to a definite agreement with America were successful, and they now had the complete upper hand in general headquarters.

This order was especially distressing for Flanders where there were already 17 boats and where the long winter nights in a district of operations, which was protected to a certain degree against bad weather, were rather favorable than unfavorable. One took partial consolation in Flanders from the fact that the mine boats at least could carry on their work unhindered, as this did not fall under the category of "commercial warfare." At that time, the mine was rising in value. The inactivity forced on the North Sea submarines led to the construction of mines for the large torpedo submarines which could be fired from the torpedo tubes of the ships.

In the North Sea, therefore, the order was found less difficult, as the number of boats there was greatly reduced through the loss of 11 boats and the 6 boats which had been sent to the Mediterranean. Of the still remaining 13 boats, 4 could not be used on the western coast of Great Britain without undergoing repair from the very bottom up. Many officers on the submarine "front" considered it advisable to send to the Mediterranean all the boats which were in good material condition, as there was a promise here of further successful activities. The fact, however, that the submarines were considered a very safe defense for the German Bay prevented such action being taken.

It is of historical interest to note that the number of neutral vessels which in the period between February and October 15 were searched in the blockaded district and then released because no contraband was found on them, amounted to about 300. In this way about 700,000 tons escaped us which was more than had been sunk since the declaration of the submarine blockade.

The numerous orders reducing and restricting the submarine war from its original scope can only be partially touched on in this review; as a matter of fact, they increased in the course of time to such

an extent that it was absolutely impossible for the submarine commander to hold them all in their heads. It was no rare thing for the mate or some other trusted assistant of the commander to have to bring numerous documents up to the turret or the submarine bridge before the attack. These documents were then gone over, and it was carefully ascertained whether the vessel in question could really be sunk or not. And it often happened, as the proverb says, "False however done." To make it clear to a successful commander upon his return absolutely worn out from a long trip that he must only answer for the one or the other sinking was a painful and almost impossible task for those who knew the effect of such on the commander in question. This second period of the submarine warfare showed very clearly that without a clear political policy, no matter how brilliant the military results were, the whole efforts were for naught.

It was only in the Mediterranean that in the following period from October, 1915, to the end of April, 1916, the submarine warfare presented the clear picture of continuity as already described; in the North Sea and in Flanders the picture is chaotic and confused. Within the jurisdiction of the commander of the North Sea submarines, the orders were rigidly carried out and the boats were used in a purely military way in which no notable sinkings were made. Especially bad weather proved a great hindrance, and many boats had to spend a disastrous length of time in the yards undergoing repairs and improvements. A commercial warfare trip of the *U-24* on the west coast in December, 1915, interrupted the system. The warfare was opened up again, due to the fears of the admiralty staff that the submarine activity in the Mediterranean, which up to this time had been so successful and practically without loss, would soon have a halt called to it through the antisubmarine forces sent to the Mediterranean by England if the North Sea submarines ceased all activities on the British coast; it was only the Flanders submarines that continued to guard a portion of the canal. The trip in question represented a "winter experimental trip," during the course of which Lieutenant Schneider sank a total of 15,000 tons, although he was distinctly forbidden to sink passenger steamers and neutral ships.

Mine-laying operations of the large torpedo submarines, scouting trips of the submarines in connection with the numerous mine operations which Admiral Pohl carried out with the fleet in the open North Sea, and convoy duties played a special rôle during this winter. In this way the *U-20* paved the way for a mine-laying operation of the auxiliary cruiser *Mowe* on the northern coast of Scotland, west of the Orkneys, by scouting this district in November, and in January

the *U–70* accompanied the steamer *Marie*, which left the German Bay for East Africa.

In Flanders, up to February, 1916, there was increased activity on the part of the mine layers; the small B submarines were doing picket duty on the Flemish coast. From November 21, 1915, it was permitted to sink without warning ships sailing under an enemy flag which were evidently steering toward or departing from the French harbors between Dunkirchen and Le Havre. Hospital ships, passenger ships, and neutral ships were excepted.

In Flanders, in the summer of 1915, the activities of the submarines were rendered more difficult on account of the fact that outside of the former inadequate but gradually improved mine blockade of the Straits of Dover, the enemy laid a large net across the canal beginning at the South Goodwin fire ship and extending to about 110° to the right. This was attached to large buoyant bodies, buoys, and floats; it had to be passed at night unsubmerged, as in a submerged condition the boats could be caught in the net very easily. But since the enemy himself also had to take great care not to come into any contact with the net, it was necessary to lay out a number of light buoys which were not only along the net itself but some were also at a great distance from it in order to serve as warning buoys. These light buoys soon became the trusted friends of the Flanders flotilla. They were given numbers and served as a most admirable aid to navigation. Also large unilluminated buoys which the enemy had to set out for the safety of his own navigation were also very advantageous for us; a large buoy at 51° 20.6′ north and 2° 7.2′ east served for a long time as the steering point for all the submarines which, coming from the north, desired to pass the Dover-Calais Narrows. (It bore the number 2501.) Lying on the ground in its neighborhood, the boats awaited the favorable time and currents for passing the narrows. It was absolutely astounding what feats the small, easily submersible boats almost always performed under trustworthy command. Long self-training on the part of the Flanders commanders, together with instruction, had brought them to this degree of efficiency. During this period the *UC–9*, *UC–5*, and *UB–26* were lost in Flanders, and the *UC–8* was interned in Holland after running aground near Terschelling.

In the beginning of 1916, the enemy's antisubmarine measures against the Flanders boats began to be sharper and more important. It was especially active in the mine-laying territory of the C boats, but later on extended to the course of all the Flanders boats, while in April, 1916 (Easter Monday), a large submarine net with mines attached was laid along the entire Flemish coast at a distance of about 15 miles, and this was guarded continuously for several months.

The flyers and ships stationed by this net endeavored to force the submarines under water and then chase them into the net. The enemy flyers in Flanders were an ever-increasing annoyance for our boats.

One step on the way to the resumption of the submarine commercial war was Bulgaria's entrance into the war on the side of the Central Powers. The chief of the general staff of the army, General von Falkenhayn, considered that the proper moment had now come for the resumption of the commercial warfare, as through the entrance of Bulgaria the danger of intervention of other neutrals could be considered slight. The chief of the admiralty staff, Von Holtzendorff, supported these efforts most energetically. Tirpitz took a definite stand in favor of it, stating that the moment for the more energetic submarine warfare had come, the vacancies in the submarine ranks had been filled, and any longer delay would be disastrous. The discussions between the army and navy authorities in regard to the matter began in the war ministry on December 30, 1915.

Two memorandums from the admiralty staff followed on January 7 and February 12. In these memorandums the hope was expressed that through an unrestricted use of the submarine the English resistance could be broken in at least six months—a period set as a result of questions put by the prime minister.

The American danger was clearly seen, but it was stated that the war must be finished by the autumn of 1916 if such were in any way possible, as otherwise there would be no hopes of dictating a peace favorable to Germany. The second memorandum was sent to a large number of economic experts, who decided unanimously in favor of it and saw in an immediate resumption of the unrestricted submarine warfare the last favorable prospect for Germany.

At the final discussion in Wilhelmshaven, on March 6, 1916, the Kaiser, against the vote of General von Falkenhayn, vetoed for the time being the unrestricted submarine warfare which was to be carried on against all vessels (also neutrals, without a repeated warning in individual cases) encountered within a definitely defined district, hospital ships and the like excepted. Von Tirpitz, who endeavored to bring about the unrestricted submarine warfare with every means in his power, was dropped even before the decisive meeting, as he was not invited to participate. Tirpitz's relief followed on this, March 17. History has proved him in the right. In March, 1916, it was the highest time for the declaration of the unrestricted submarine warfare. Even though America should have immediately declared war at that time there is no doubt but that England was far behind the antisubmarine defense which she possessed in February, 1917, when the final declaration of the unrestricted submarine warfare was made. In the first place, there were fewer armed steamers, and

then there was the time and labor required to make the 20,000 guns which were necessary, according to our calculations, to arm the large enemy steamers.

Jellicoe's efforts in the summer of 1915 to sow the German Bay thickly with mines failed owing to the fact that there was no proper type of mine on hand; such a type was only developed in 1916, whereupon 100,000 of these new mines were ordered. Even according to Jellicoe's own statements, no success could have been looked for before the end of 1917; if we had resumed the unrestricted submarine warfare in March, 1916, we would in all probability have won it by that time. Hundreds of outlook and convoy vessels, which had been ordered by the enemy, were still in the first stages of construction; by 1917 they were all completed.

Another question is whether we ourselves had a sufficient number of boats to be able to resume the unrestricted submarine warfare in March, 1916. To answer the question, let us review the number of boats on hand in March, 1916: 25 large boats; 43 small boats; 52 large boats, 89 small boats almost ready. The 25 large boats were, with three exceptions, fully tried-out boats, with long personal records.

From April on those boats under construction and almost completed were finished with a degree of rapidity never before attained. The quota of new boats placed in service each month was never so favorable during the entire war as during the period between April 1, 1916, and January 1, 1917.

The monthly record for the year 1916 is as follows:

March	9	August	10
April	8	September	10
May	9	October	11
June	8	November	11
July	9	December	15

Such an increased rate of output was only possible again in November, 1917, thanks to the efforts of the submarine department. From November, 1918, to November, 1919, the monthly output of boats would have amounted to an average of 27 boats, small and large.

If as a result of the Imperial decision of March 6, 1916, the unrestricted submarine warfare was not resumed, nevertheless the efforts of the general staff and the admiralty, supported so strongly by Admiral Scheer, chief of the High Seas Fleet since January 15, 1916, had the following results:

After orders had been issued on the 11th of the month regarding the treatment of armed merchantmen, to the effect that such were to be treated as war vessels, on February 24 came the order for the reopening of the commercial war on the western coast of England,

wherein the stations on the southern coast of Ireland were to be mainly filled. It is worthy of note that in the three years—1915, 1916, and 1917—it was always in February that the final decisions relative to submarine warfare always occurred. This was not due to accident, but at each recurrence of this month hopes arose anew that under the better weather conditions of the spring the use of the submarine weapon could be resumed with successful results.

On February 24 the commander of the North Sea submarines (Captain Bauer in Emden) personally gave the submarine commanders orders for the new commercial warfare, which differed very slightly from a commercial war carried on according to prize rules, as may be seen. New hopes revived in the hearts of all the submarine commanders that through this restricted form they could still come to the successful employment of the weapon; that the new method would fall to pieces after two months was hidden fortunately by the veil of the future. After the end of the month the *U-22* and *U-32* put out to sea, headed for the west coast. Up to the end of April the commercial warfare in the North Sea was very successful.

The *U-70*, under the command of Lieutenant Wunsche, sank from 20,000 to 30,000 tons; the *U-44*, under Lieutenant Wagenfuhrer; the *U-69*, under Lieutenant Wilhelms; the *U-66*, under Lieutenant von Bothmer; and the *U-20*, under Lieutenant Schieber, sank a total of 86,455 tons in April; there were very great possibilities of increasing this figure during the summer months.

The order of February 24 regarding the initiation of the commercial warfare arrived in Flanders at the same time as the repaired submarines. The *UB–18* (Steinbrink) and *UB–29* (Pustliuchen) left immediately for new pioneer work on the other side of the Dover-Calais line; but just at this time occurred the event that was especially tragic for the submarine command, namely, the sinking of the French steamer *Sussex* by the *UB–29*, on March 24, 1916. From the painting of the ship and the large number of troops on deck the submarine commander must have taken her for a transport. However, since she was a passenger steamer and since as a result of the investigation made after she was towed in, it was proved conclusively that the boat had been torpedoed, this gave England renewed opportunity to incite America to address her notes to us again. The exchange of notes lasted for about a month, and then, on April 25, as a result of the Wilson "knock-out note" (as Tirpitz called it) came the order that the submarine warfare could only be carried on in accordance with prize rules.

Already during the discussions which preceded this order Admiral Scheer, in his capacity as commander in chief of the fleet, addressed a very strong opinion to the admiralty staff—either unrestricted submarine warfare or a purely military use; but under no circumstances a commercial war under prize rules. At home this received the support of the submarine officers with war experience, as it was recognized as a means of breaking down the vacillation of the general staff and bringing them to energetic action. The chief of the Flanders submarine flotilla, Lieutenant Commander Bratenbach, supported the standpoint of the commander of the fleet, and Lieutenant Schwieger, commander of the *U–20*, who, as an especially experienced submarine commander, was asked for a report, expressed himself very definitely regarding the possibilities of carrying on the submarine commercial war according to prize regulations. So long as there were any hopes of the abrogation of the order of April 25—

German U-boat at sea.

only commercial war according to prize rules—and the possibility of obtaining the continuance of the easy terms up to then in existence—to sink enemy commercial vessels in war territory without warning; also troop transports and armed merchantmen—everyone agreed with turning down the commercial war according to prize rules.

As it became clear that we were actually going to collapse under Wilson's "knock-out note" of April 20, the opinion of the majority of the North Sea submarine commanders and, soon after, that of the chief of the Flanders submarine flotilla, quickly changed. The purely military use which was soon enjoined on the 30 large North Sea submarines left them practically useless, for just how little purely military usage the boats would have, outside of close connection with the High Seas Fleet drawing up for battle, nearly two years of war had already furnished ample experience. The chiefs

of the flotillas and the commanders of the submarines at the Ems made energetic efforts to bring about an alteration of the regulations on the part of the commander of the submarines and the naval staff at Wilhelmshaven. It was argued that during the coming summer months the commercial war carried on outside of the territory guarded by the enemy according to prize rules held great promise, and that the danger to the boats would be greatly diminished by adopting a suitable method or system of operation, *such as stopping the steamer while still at a great distance, approaching same submerged, or taking along a captured steamer for the purpose of search.* This was not without effect in Wilhelmshaven, but the commander in chief of the submarines, Captain Bauer, was not present during the days preceding the decision. He was still out with the *U–67*, engaged in an operation on the west coast of England. When he returned he presented to the commander in chief definite proposals for carrying on the commercial warfare, which were referred by the latter to the admiralty staff. The chief of the division of operations of the naval staff, Captain von Levetzow, was at the time in Berlin. He brought back very unfavorable reports as to the attitude of the government and admiralty staff in connection with the possibility of procuring permission to carry on the intensified submarine warfare, so that the chief of the fleet was confirmed in his intention to only attain the intensified submarine warfare by persistently refusing any other form of the submarine war. Therefore the commercial warfare according to prize rules was refused.

Now, in spite of the refusal of the commander in chief of the fleet, headquarters (admiralty staff) could have *ordered* the commercial war according to prize rules, but this did not occur. In May, June, July, August, and September, 1916, there was no commercial warfare in the North Sea. The loss in tonnage not sunk, through our abandonment of the submarine commercial war in the North Sea, at a conservative estimate must have amounted to at least 400,000 tons. There are certain persons in Germany who claim that the loss of 1,600,000 tons of tonnage unsunk through our failure to carry on the submarine war according to prize rules also helped to bring about the fate of our submarine warfare. Since the end of the war the enemy on various occasions has also stated that the interruption of the commercial war in the year 1916 was England's salvation.

An early summer lay over the waters of the German bay as the submarines, after their return from their last commercial warfare trips, or after the completion of repairs at the yards, began to concentrate at the base again. In conformity with the order for a "purely military use," the boats often lay for a long time at the base awaiting some kind of an order from the fleet to prepare for action

which would call them into definite positions. When in the period between May 2 and 5, 1916, the English fleet undertook an advance in the direction of Horns Riff in order to use seaplanes, the *U–24* succeeded in getting into contact with large English warships. The attempts of the *U–51*, *U–70*, and *UB–22*, which were stationed as outlooks in the same territory, to attack the enemy reported by the *U–24* by wireless signals, failed, unfortunately, as the coupling between the Diesel motor and the electric engine on the *U–24* burned, so that the boat was no longer able to follow the enemy on account of insufficient speed.

Several boats made scouting trips in the northern part of the North Sea in the beginning of May, but had no results.

In the early part of May, 1916, the efforts of the commander in chief of the fleet, Admiral Scheer, to strike a blow at the British took more and more definite form.

A plan was next worked out for an attack on the British coast near Sunderland, in order to draw the enemy from their bases and strike them in the neighborhood of the Firth of Forth or south of there. As preparation for this, an extensive scouting of the North Sea between England and Norway by the submarines was also planned. When this scouting was finished the boats were to take positions principally in front of the English bases, so that they could attack the British forces on their way to and from the base after having been enticed out by our fleet. The boats were evenly distributed for this purpose, in the approach to the Orkneys (Scapa Flow), the Firth of Forth, the Firth of Moray, and the Humber, and were also stationed at other important strategical points of the North Sea, as, for instance, by the Terachelling fire ship. The Flanders boats were to take corresponding positions in the Hoofden and before the Thames. It was a very extensive and carefully worked out plan. In accordance with it, the boats immediately began to set out. The *U–74* left on May 13 for the Firth of Forth on a mine-laying operation; it was to shut off the course from Bass Rock to the east and southeast. On May 13 the *U–24*, *U–32*, *U–63*, and *U–70* put out to sea.

On the 17th the *U–43*, *U–44*, and *U–52* left for their outpost positions in the northern part of the North Sea. The *U–47* left on May 20; this was to make the last thorough scouting of the district around Sunderland for our fleet, as well as to clear the course of mines, burn fire signals, etc. After reporting the results, the boat was to take up its position before Kinnaird Head.

The *UB–21* and the *UB–22* put out to sea on May 21 for the Humber, and the *UB–27* for the Firth of Forth, in order to take up its post within May Island; the *U–72* proceeded to the Firth of Moray

to lay a mine blockade along the course. Stotfield Head to Kinnaird Head.

On May 22 the *U–46* and *U–67* left their stations and proceeded to Terschelling Bank. The commander in chief of the fourth submarine halfs flotilla, Lieutenant Prauss, went on board the *U–67* in the event that it would be necessary to command an operation on the part of several of the submarines at sea. These two boats contended for eight solid days with enemy submarines which were also using Terschelling fire ship as a guide on their way to the German Bay. They also often sighted destroyers and other rapid ships. The strains on these two boats in a personal and material way were particularly great, and this was to claim its revenge later.

At 2 o'clock on the morning of May 2 the *U–47* reported to the commander of the high seas fleet, the results of his scouting expedition around Sunderland, stating that there was no possible reason why the fleet should not proceed to this point on the coast. Admiral Scheer did not take advantage of this favorable condition, as up to May 30 the weather was not suitable for the airships. Admiral Scheer did not consider it advisable to make this advance on the English coast without the assistance of airships, for otherwise he could not offset the advantage which the enemy had in an attack in their own waters, outside of a degree of intelligence work through the boats themselves. As far as regards the successful possibilities of the submarines, it was very regrettable that the decision to attack along the English coast had to be abandoned, for then in all probability the boats would have had the opportunity of taking part in the battle. Admiral Scheer waited up to the 30th of May to see if Jupiter would bring him favorable weather; for it was then high time to undertake something with the fleet if the positions of the submarines were to be used at all. It was therefore decided during these days to proceed to the north toward Skagerrak instead of to the English coast, and there, supported by the main fleet, have the lighter forces engage in commercial warfare.

There are one or two events occurring up to this point which must be spoken of again.

On May 28 the *U–72* reported that it was on the way back. On account of damage to the fuel pumps in the oil engines it was not able to carry out its task of laying mines in Moray Firth.

On May 29 the *UB–27* came back from an expedition to the Firth of Forth. Sailing under water, it had had a glimpse in the Bay of Kirkaldy and up to Inchkeith; it had sighted no war vessels, but on May 24 had met four of the older armored cruisers and destroyers by the North Carr fire ship; the boat had been caught three times in the net; the propeller was choked.

At 8 o'clock in the evening of May 30 the *U–46* arrived in the Ems coming from its position near Terschelling: the only conning tower periscope on the boat had become useless. Lieutenant Hildebrand was thus forced to abandon his position and return; he reported a large number of floating mines near Terschelling Bank, and many enemy submarines, and that he had been fired on once with torpedo and once with artillery from an enemy submarine. On account of the general tense condition of everything the *U–46* was sent to Emden to have the periscope changed.

At noon of the 31st the commander of the Ems submarine flotilla had three boats ready for action at his disposition, the *U–19*, *U–22*, and *U–53*. These boats had just come from the yards or had just finished the trial trips. (*U–53* and *U–64*.)

The High Seas Fleet set out during the night from the 30th to the 31st of May. At 7 o'clock in the morning of the 31st of May, the *U–22* reported from its position 155 sea miles east of the Firth of Forth, two large battleships, two crusiers and torpedo boats taking a southeastern course. At 9 o'clock in the morning, reports came in from the *U–66* of the presence of eight large enemy battleships, small cruisers and torpedo boats at 60 miles east of Kinnaird Head, taking a northeastern course. The *U–66* attacked this group, but on account of the strong protection, did not fire.

It could be seen from these reports that strong small cruisers of the enemy fleet were in sight. It was also clear that the fleet in its advance to the north, had encountered the enemy. At 10 o'clock in the evening, Ems received the signal; the submarines that were ready for action and the *U–67* (which lay near Terschelling) were to proceed immediately to the north. At 6 a. m. they were to report their positions. The *U–19*, *U–22*, and *U–64* left the Ems at 11.45 p. m. It was found to be impossible to reach the *U–67* by signal, as the boat, after lying 14 days in an extremely dangerous territory, was apparently severely strained and had submerged.

At 6 a. m. the *U–46* left the mouth of the Ems to join the other boats in their advance to the north. No one had any idea that this last boat to leave would be the only one of the submarines that would have an opportunity of firing on one of the enemy's battleships. While acting under orders from the commander in chief of the high seas fleet at 8.57 a. m., the first three submarines to leave were hunting out the cruiser *Elbing*, which had been sunk in the meantime; our outlooks reported at 10.30 a. m. a damaged English ship about 80 sea miles west of Horns Riff, with a course WSW. The *U–46*, which was already stationed at a favorable position with relation to this course, was ordered to start out so that it would meet this ship. The *U–46* sighted the enemy at 12.30 p. m.; it was the

battleship *Marlborough*, which had been struck by a torpedo during the battle of the day before, and now, accompanied by only one destroyer, was proceeding to the shipyards on the southern coast of England. Since the *Marlborough* was proceeding in a zigzag course, the *U–46* only approached up to a distance of 3,000 meters. At the moment of firing the torpedo the *Marlborough* turned six points, so that the torpedo missed; the submarine had no further opportunity to attack. It was very unfortunate that the commander in his efforts to reach the scene of battle proceeded to the north after coming to the surface instead of keeping in contact with the ship, which was only moving at a speed of 12 sea miles, for it was still possible for the *U–67*, and probably other Flanders boats, to have reached the scene. The *U–67* was the only submarine (without any assistance from signals) which tried to find the *Marlborough*, but it was not successful.

All the other efforts to enable the submarines to make an attack remained fruitless. The *U–19*, *U–22*, and *U–64*, which received orders to proceed to Petershead and in the direction of Scapa Flow, were so hindered by bad weather that they had to put about. At about 10 a. m. on June 2 they were in the approximate latitude of the English main fleet, only a little farther to the west. While advancing toward Flamborough Head, in accordance with orders from the commander of the III submarine flotilla, the *U–46* sighted 4 small cruisers and 10 destroyers; it did not succeed in making an attack. The submarines also had no success against the English ships returning to their bases, as this took place during the night of the 2d and 3d.

Therefore the Battle of Skaggerak also unfortunately gave the submarines no opportunity for successful action, in spite of the gigantic strains to which the boats were subjected, due to the long period they were obliged to lie on the enemy's coast. The Flanders boats, which were stationed in such a way as to be able to strike the enemy's forces leaving the Thames, also had no success; they only sighted coast guards. In submarine circles after the battle one often heard the opinion expressed that had the boats been present at the battle itself, in accordance with a different plan of operations which had been recommended by certain submarine officers, the boats would have been more successful, for the enemy's groups kept moving back and forth practically in the same district. By the boats starting out about 24 hours prior to the departure of the fleet and covering the territory between Horns Riff and the Skaggerak, this would have given many boats an opportunity to attack. However, at the climax of the battle it would not have been easy for the boats in a submerged state to have distinguished friend and enemy in the dense smoke

screens, and the tremendous impact of heavy projectiles and the moving about of destroyers and torpedo boats at full speed would have forced many a boat to have sought safety at a greater depth. However, in the meantime, in the very extensive territory over which the submarines could have been distributed, they would have had many admirable opportunities for attack; they could have attacked the English fleet, and as the fleet drew up for battle they could also have attacked those portions of it which, even at the very climax of the battle, scarcely succeeded in firing, and then finally on the morning of June 1 they could have proceeded against the enemy withdrawing toward the north. The enthusiasm in submarine circles revived again when it became known on June 6 that the cruiser *Hampshire*, with Lord Kitchener on board, had been sunk on a mine laid by Lieuteant Beitzen of the *U–75* west of the Orkneys.

After the Battle of Skaggerak the submarines were mainly stationed as outposts at the entrances to the German Bay, as it was believed that England would endeavor to recover the prestige lost at the Battle of Skaggerak by attempting an advance on the German Bay. But this did not occur. The numerous groups of submarines which were stationed at definite points in the North Sea also had no success during the period from July 3–13 and July 28 to August 4. During such trips the commanders quite automatically resumed activities against enemy merchant shipping.

Particularly unfortunate was the transfer by the naval staff of four large boats to the Baltic, owing to the slight opportunities for results in the North Sea in June, July, and August. There they lost contact with the North Sea command and gradually became unaccustomed to those methods of operation, which was particularly unfortunate when these boats were recalled to the North Sea for the unrestricted submarine warfare.

The mine-laying activities in Flanders were very energetic until October, 1916, on the English coast and near Havre, Boulogne, and Cherbourg, with the newly arrived C–II boats. Seventy thousand tons of enemy shipping were thus accounted for in the last part of the summer of 1916.

Otherwise during this time the general impression of stagnation created by the restrictions of the order of April 25, 1916, was felt in Flanders, together with the attempts of the chief of the submarine command to control their operations. The small B boats conducted a determined campaign against the enemy barriers. By the Flanders coast they destroyed the marking buoys which were continually replaced by the enemy, and assisted the B–C boats to enter the harbor under the increasingly difficult conditions of navigation, as well as

rendering aid to the destroyers of the II flotilla which were sent to relieve the pressure.

The boats used in the operations against the mouth of the Thyne were not able to attack successfully any man-of-war and sunk only a slight amount of merchant tonnage. When toward the middle of July, 1916, the naval staff desired to hinder troop transport across the channel the commander of the Flanders divisions attempted this with numerous mine-laying expeditions near Calais, but notified the naval staff that results could only be expected provided they were permitted to torpedo transports without warning (prohibited at the time). In order to support this viewpoint Commander Bartenbach ordered Lieutenant Steinbruck to carry out a reconnaissance trip with the *UB–18* to Havre and the mouth of the Seine. Steinbruck attempted in all 41 attacks on this trip, all of which were broken off because the means of identifying transports as given in the orders (masses of troops plainly visible on deck, or war material) could not be clearly determined. As the orders now read it was only possible for him to sink 7 small steamers and 10 sailing vessels.

At the time of the visit of the chief of the naval staff to Brugge on August 7, 1916, Captain Bertenbach attempted to use the above results to obtain permission for sinking vessels on north-south courses without warning in the following area, viz: Bounded by the line, Cape de la Hague-Portland and Calais-Dover. As a result of this attempt the naval staff answered on August 15 that the conditions on the Somme were not such as to warrant bringing America into the war on account of the sinking of transports without warning in the English Channel.

The 19th of August was fixed by Admiral Scheer for another advance with the fleet against the east coast of England.

This time the experiences of the submarines at the time of the battle of Jutland were put to good use. The submarines ran out on the nights of August 17 and 18 shortly before the fleet in order to take up positions on two lines on the day planned for the combined operations, the one line near Flamborough Head (four boats) and the northern line, off Blythe (six boats). The course of the submarines was so chosen that they patroled the greatest possible area for the following fleet.

The departure of the numerous German submarines from the German Bight was observed by the English submarines and reported to the English commander in chief. Admiral Jellicoe states in his book he concluded from this that the German fleet was about to attempt further operations and therefore decided to leave Scapa Flow on the evening of August 18. At dawn on August 19 he had reached a position just off the "Long Forties." At 7 a. m. on August 19, the scouting forces of the English battle-cruiser squadron on their way

south ran into the submarine line near Blythe. In this manner the *U–52* (Lieut. Hans Walter) was enabled to sink the modern light cruiser *Nottingham* with three torpedoes. Soon the *U–53* (Lieut. Rose) was able to make contact with the enemy main fleet and report its position continuously. In this manner Admiral Scheer was kept continuously informed of the enemy's position, as well as by confirmatory reports from the numerous airships. Unfortunately, one such report from the *L–13* at 2.20 p. m. caused the commander in chief to alter his plans for an attack toward the English coast and to turn toward the force of heavy ships reported by the *L–13* to be to the southward in the latitude of Humber. Unfortunately, the *L–13* was mistaken both as to the location of the enemy and their strength. Scheer could not find them, but since they were really the Harwich force, under Commodore Tyewhitt, consisting of the most modern cruisers and destroyers, he would in any event not have been able to bring them to battle on account of their high speed.

In the early afternoon the boats on the southern line sighted the smoke of the enemy forces. *U–49* and *U–66* steamed to attack. *U–66* (von Bothmer) was able to attack the English light cruiser *Falmouth* about 6 p. m., two torpedoes hitting without, however, sinking the ship. *U–66* and *U–49* attempted to finish off this vessel but were unable to do so up till dark on account of the good destroyer screen. The vessel was finally sunk the next day by *U–63* (Lieut. Otto Schultze).

This was the most extensive of the combined operations of fleet and submarines. Lord Jellicoe expresses astonishment in his book that such "submarine traps" had not been resorted to sooner in the war. In this he expressed what had always been the desire and heartfelt wish of the submarines and their commander, Commander Bauer, since the outbreak of the war.

It was attempted as a consequence of these operations to suggest combined submarine and aircraft operations against the enemy forces on the eastern coast of England, but without success. Therefore at the end of August Commander Bartenbach in Flanders resolved to send out his best type of the *B–2* class to operate against merchantmen under "prize rules" in the western part of the channel, since all attempts to bring about sharper action against transports in the narrows of the channel had failed and he could not sit idly by with his boats laid up.

On September 1, 1916, the following boats steamed out into the western entrance of the channel: *UB–18* (Steinbruck), *UB–23* (Voigt), *UB–29* (Pustkuchen), and *UB–39* (Werner Fürbringer). These operations resulted in 70,000 tons sunk. Therefore Commander Bartenbach decided to extend these operations, although

the probability of loss and damage due to the increased patrol and the arming of vessels made the chances less favorable. No attack could be made on the military transports under the existing conditions and under "prize rules." The *B–2* boats were handicapped by low surface speed (barely 9 knots) and weak armament (only one 5-cm. gun being mounted). An increase of armament to 8.8-cm. guns was immediately decided upon.

The result of the activities in Flanders at the end of September and beginning of October made itself felt in the North Sea to the extent that the boats there undertook merchant warfare on their own initiative. Thus the *U–57* under Lieutenant George sank a large steamer off Flamborough Head and 21 fishing vessels, while the *U–49* under Lieutenant Hartmann sank three sailing vessels and sent in one prize to Ems.

These events were not brought about alone by the activities of the Flanders flotilla and by the success then being achieved in the Mediterranean, but by another event of the greatest importance. Hindenburg and Ludendorff had been appointed to the supreme command of the army. These two leaders realized that no decision could be obtained in the war without the unrestricted submarine warfare.

(Naval attaché's note.—It is interesting to note that the Spanish military attaché spent many hours in general headquarters at this time in an effort to dissuade General Ludendorff from the unrestricted use of submarines and to present the danger of a war with the United States. These arguments were all rejected by Ludendorff.)

At this time, the question of the removal of active submarine warfare in Flanders and the North Sea, was under discussion at Pless (the general headquarters) by the general staff. The Chancellor, von Bethmann-Hollweg, believed or was afraid that the renewal of this type of warfare would bring Holland and Denmark into the war. Although these fears were rather far-fetched (the German naval attaché at The Hague, Captain von Müller, and others denied this danger), yet the two army leaders decided to hold back the unrestricted submarine warfare until the military situation in Rumania could be sufficiently cleared up to permit reserves to be brought up to safeguard the Danish and Dutch borders. At any event the fact remains that the official decision stood regarding the unrestricted submarine warfare, only the time set for its beginning was still undetermined. It was our tragedy that at this time no decision was made for an increase in the building program.

Up until now the order for a large number of submarines of a certain type was held back because the constantly changing conditions under which the submarine warfare was being carried on prevented a definite decision as to the best type shown to be neces-

sary by the experience at the front. A long series of submarines should have been ordered. In this way only could the dock yards and their supporting industries have been utilized to the best advantage. In any event a greater number of shipyards should have been drawn into submarine construction.

It was fatal that Admiral von Capelle, the Secretary of the Navy, permitted himself to be convinced and therefore decided that a too great number of submarines existing at the close of the war would have a detrimental effect upon the further development of the fleet in so far as the naval budget and administrative matters were concerned. The chief of the submarine bureau of the German Admiralty, Captain Spindler, could only obtain orders for new boats after much delay and numerous cancellations. Instead of this, the secretary should have taken full responsibility and helped his assistants in their task of utilizing the shipbuilding facilities to their best advantage.

In this way it came about that after the conference in Pless in 1916 only 2 800-ton boats, 16 400-ton boats, and 9 submarine cruisers were ordered. We might note here that the order placed in February, 1917, for 6 800-ton boats and 45 400-ton boats did not meet conditions then, when the unrestricted submarine warfare was ordered on February 1, 1917. It was not until the pressure from the front in June and December, 1917, became so great that further orders were placed, as follows: In June, 1917, 9 850-ton boats, 10 2,000-ton boats, 37 500-ton boats, 39 450-ton boats (mine layers), 20 350-ton boats (single-hull boats); in December, 1917, 12 850-ton boats, 18 2,000-ton boats, 36 500-ton boats, 34 450-ton mine-laying boats, 20 350-ton single-hull boats. For a large building program of submarines even these orders were insufficient. This will be discussed later.

New life was instilled into the flotilla, which had been gradually stagnating owing to the improbability of results from a "strictly military warfare," by the dispatch of the *U–53* to America and the orders to three boats to carry on merchant warfare in the northern polar ocean.

U–53 steamed out on her cruise on September 17. Her orders were to attack enemy warships which were supposed to be guarding the entrance to Long Island Sound awaiting the approach of the *Bremen*. Further, she was to conduct merchant warfare in accordance with "prize rules." On October 7 the *U–53* arrived in the harbor of Newport. After the exchange of formal visits she left port on the same day. On October 8 five English or neutral vessels with contraband were sunk near Nantucket fire ship while American destroyers stood by and rendered assistance in saving the crews. On October 28 this boat arrived in Helgoland in good condition.

The *U–43*, *U–46*, and *U–48* operated off North Cape (Norway) and the Murman coast. This resulted in the sinking of about 50,000 tons aside from the fact that *U–48* brought in a steamer from North Cape to Wilhelmshaven, with munition, guns, and automobiles valued at 40,000,000 gold marks.

While these boats were still at sea, orders were issued on October 6 for general submarine warfare according to "prize rules" in the manner being carried out in Flanders, as initiated by Commander Bartenbach.

It must be said here that the period which follows now from February 1, 1917, was particularly favorable. New commanders, such as on the *U–49* and *U–50* obtained successes in the Bay of Biscay amounting to 40,000 tons. The more experienced commanders obtained equally favorable results. There was sufficient war experience available to equalize under some conditions the restrictions imposed by the orders issued For this reason the submarines took steamers with them for the purpose of saving the crews of the vessels sunk, until they could be sent filled to a neutral port. By skillful operation in certain areas the dangers from enemy patrols could be reduced. For example, operations on the Spanish coast near Finisterre and further south were particularly successful.

In Flanders the merchant warfare according to "prize rules" could only be carried out successfully by boats of the *B–11* and *C–11* type, since these boats were able to search out the western stretches of the channel. Even here, though they were much more hindered in their operations than the larger North Sea boats, which could choose their field of operations. The smaller *B–1* boats were not effective in this type of warfare. Special mention is due here to the following officers for the results accomplished at this time, as well as the Flanders commanders already mentioned and the numerous other admirable officers: Lieutenants Wassner, Loss, Howalk, Viebag, Salzwedel, and Hundins.

After long negotiations, when the political leaders and the general staff had finally been convinced of the necessity of sinking armed merchantmen without warning, it was decided, on January 9, 1917, to declare an "unrestricted submarine warfare" on January 12, 1917, which would begin on February 1, 1917.

In spite of the late date at which this decision for energetic submarine warfare was arrived at it was generally greeted with joy at the front as a relief from the continual vacillating policy which had existed up until then and in spite of the fact that there existed certain fears as to whether the material was sufficient to carry through the operations.

Unfortunately the declaration for this unrestricted warfare was coupled with a previous declaration which reacted to the disadvan-

tage of the service. This was the statement issued in the spring of 1916 by the naval staff that the unrestricted warfare might be able to force England to capitulate in six months.

The results were twofold: (1) It created at the front a certain tension and questioning as to whether one really had grounds for this assumption to finish the war in six months. It was natural to suppose that the recreation periods in port would be shortened or abolished entirely as unnecessary, since conditions would be altered and the assumption of a long war ended. Further, the assumption of a six months' principle justified greater risks with the submarines.

In this connection the North Sea flotilla turned their thoughts to the best methods of reaching their field of operations through the Dover-Calais Straits, although this passage had with few exceptions been abandoned by the larger boats since April, 1915. However, the Flanders flotilla had in the meantime obtained great experience in making this passage and had acquired certain skill in avoiding the ever-renewed obstacles placed there by the enemy. For this reason Commander Bartenbach also advised using this passage. Therefore at the beginning of the unrestricted warfare 50 per cent of the boats passed through these straits bound for the west coast of England. In this manner several boats made record trips, of which the *U–35* (Lieutenant Petz) sank 50,000 tons, December 17, and the trip of the *U–53* under Lieutenant Rose (March 17). These were particularly noteworthy. On the other hand, other boats met with greater or less damage in attempting this passage and, due to uncertain weather or other causes, were forced to take the northern route. As the conditions for the northern passage became favorable in March, 1917, the commander of the North Sea flotilla directed that that route ordinarily be taken. His wish to investigate the conditions in the channel aboard a boat of his own flotilla was forbidden by the admiral of the fleet. This order for the use of the northern passage was given before large losses occurred in the channel, and his plan of operations was therefore justified. (2) The statement of the naval staff that a short period only was necessary before the unrestricted warfare culminated in success reacted very unfavorably upon the building program, and therefore the order placed for submarines in February, 1917, did not correspond to the needs for the project. At the investigation Admiral von Capelle himself declared that the idea of a probable early termination of the war caused him to hold back orders for a large building program, when the first of these could only be finished by the end of the year.

The successes of the boats increased immeasurably with the unrestricted warfare. February's record already doubled that of January, and in April and June the figure reached almost a million tons.

The following officers especially distinguished themselves in the North Sea in 1917–1918: Lieutenants Schwieger, Rose, Wünsche, von George, Adam, Dickmann, and numerous other officers, who made admirable records, which can not be gone into further in the narrow limits of this review.

England felt that the decisive moment was approaching, and therefore made tremendous efforts to ward off the threatened danger. From the middle of 1917 on the measures undertaken by her along this line took the following direction: (1) Rendering the passage of the Dover Straits more difficult.

(2) Increased mine and net laying in the German bight. The enemy grew more and more practiced in this regard, and the activities of the fleet became more and more a struggle to keep the courses clear. An attempt was made to combat this condition by the fleet itself laying mines, which resulted in the loss of several English mine layers in the German bight, as is now apparent from the English list of losses. This also led to the loss of some of our own submarines, Lieutenant Von Firks, on the *U–59*, running on one of our own mine barriers south of Horns Riff, as the fog prevented him from locating the navigation signals located somewhat to the south. The course which proved to be the safest was from the Ems along the Dutch coast toward the west, as the boats with very little assistance could slip along the Dutch sands up to the very edge of the area which the enemy had reported as being thickly sown with mines. From the middle of 1917 on the BB submarines (since June 5, 1915, under Commodore Michelsen) endeavored to free a larger area of the German bight from English mines, approximately between the mouth of the Ems and the outer English mine barrier in the west and northwest. The boats were to pass this area accompanied by surface craft, and from that point on were to pass the outer barriers submerged. On entering the bight the opposite method was to be employed. This method was successful in the beginning, but later on led to losses, as the enemy submarines had reported the procedure adopted by our boats, so that they (the enemy) ceased to lay simple mine barriers and adopted a system of mines and nets, the latter being laid at varying depths. Therefore in September we lost in that area such excellent and experienced commanders as Lieutenant Schwinger, of the *U–88* (formerly of the *U–20*), and Lieutenant Berger, of the *U–50*. The *U–106* (Lieutenant Hufnagel) was lost in this way October 9, 1917, while entering the German bight. As such an extensive operation as a complete sweeping of all the enemy mines in the German bight could not be undertaken, the boats were ordered to adopt temporarily the Baltic route. (Exit through the Little Belt; entrance through the Sund.)

The new commander in chief of the submarines, Commodore Michelsen, decided to use the Dover-Calais passage again after September, 1917. On September 28 the *U–70*, steaming out to the Dover Straits, ran on a net mine astern, but fortunately was able to reach Zeebrügge. In November the *U–48* and *U–94* ran aground on the Goodwin Sands on account of a heavy sea from the west or through an error in the gyro compass. It was possible to free the *U–94* by lightening her considerably, but the *U–48* was blown up by her own crew the morning after the accident.

In October Lieutenant Rose on the *U–53* made a 13-day trip, sinking a total of 28,000 tons. After the *U–87* (Speth Schulzburg), the *U–84* (Röhr), the *U–93* (Gerlach), and the *U–95* (Prinz) were all lost in January while using the canal passages, and the Flanders submarine flotilla had reported new defensive measures by the enemy in this area, Commodore Michelsen ordered the North Sea boats to abandon this route and use the course around the north of England as before.

(3) A very effective measure adopted by England just as our submarines were at the very height of their success and activity in the month of June was the formation of convoys. By forming such a convoy of from 20 to 30 steamers, the opportunities for attack were correspondingly diminished, and it was also technically difficult to make the attack on account of the submarine chasers, etc., accompanying the convoy.

The convoys were soon adopted in all the theaters of war, in the Mediterranean, the Atlantic Ocean, and also in the North Sea between the Shetland Islands and Bergen. The convoy system was adopted to such an extent in the latter district that special submarine operations were directed against it. In the beginning the large submarines were used, but subsequently only the *B–III* boats were used, until finally, in 1918, it was decided to use surface craft against these forces.

All these defensive measures taken on the whole had the result of reducing our submarine successes from July, 1917, even though up to May, 1918, this decrease did not make itself noticeably felt. It would have been possible to have kept the submarine efficiency on a par with the June, 1917, record, despite these defensive measures, if the number of submarines at the front had been increased commensurately, as the result of an extensive building program. If the latter had actually been put through at the end of August, 1916, when Hindenburg and Ludendorff decided in favor of the unrestricted submarine warfare, then the results of such a policy would have begun to be felt in the autumn of 1917. As it was, the climax was reached in September, 1917, when 132 boats were at the front (North Sea, Flanders, and Mediterranean). From this time on the

number varied between 110 boats in June, 1918, to 123 in October, 1918.

Under these circumstances it is no wonder that the front began to take up seriously, in the autumn of 1917, the question of reinforcements. The efforts of Commodore Michelsen and the high seas fleet in this connection led to the creation of the submarine department at the end of 1917 which, as an independent department of the Imperial Navy Department, was to take charge of the material and personal organization of the submarine warfare. The chief of the submarine division of the admiralty had already advised this but without any success. The time for the creation of this department was in so far favorable as after Russia's collapse, it was hoped that there would be a greater number of workmen available for the construction of submarines and the kindred industries. This hope, unfortunately, came to nothing, as the military authorities did not feel that they could release any greater number of workmen on account of the impending offenses in the west. In the submarine department the thought as to whether or not it would not be more advisable to relieve the eastern front for the purpose of extending the submarine activities rather than for strengthening the western offensive, was given very serious consideration. At the same time, the possibility of using the additional forces freed from the eastern front in a final operation against Italy would have been to the advantage of increasing the submarine activities in the Mediterranean, which had already been so successful. Since this same point of view was also held by other commanding officers, the chief of the submarine division, Vice Admiral von Mann, began to take steps with this end in view. But unfortunately there was no prospect of attaining unity of aim and effort in this connection among the heads of the various military departments. At the same time, the officers in the navy had too great confidence in Hindenburg and Ludendorff to take any steps which would be contrary to their ideas. Therefore, the western offensive won out. Nevertheless the chief of the submarine department did succeed in getting the military authorities to relieve some workmen and, by taking appropriate steps in the matter of organization, he was thus able to hasten the delivery of submarine material from the industries involved. The submarine department immediately started on the work of extending the facilities of the bases so as to decrease the length of time necessary for the repair of the boats, etc. At the beginning of April extensive work was begun at Pola and Cattaro. It was especially tragic that the work on the Pyovica yards in the Bay of Cattaro was only finished just shortly before the necessary evacuation of the Austrian bases. In Germany itself extensive work was begun at the Holm shipyards in Danzig, a new base was in

course of preparation at Lübeck, and another in Finkenwerder near Hamburg (the present Deutsche Werft A. G.) and the yards at Emden were being enlarged. In December, 1917, work was begun on 30 large and 90 small submarines, and up to June, 1918, 64 more large boats and 156 small ones were started. A number of yards not previously engaged in submarine building were now called on for this work. Therefore, it happened that at the time of the revolution there were 440 submarines under construction, 137 of which were large ones. In September–October, 1918, 330 more boats were ordered. Hugo Stinnes was consulted and also all the directors of the German industries especially concerned with the construction of submarines were called to Berlin to make proper arrangements for the most effective subdivision of labor. Special attention was devoted to the question of the extent to which the industries could relieve the overworked yards. In all these arrangements the submarine department felt very keenly all the omissions and failures of the previous years and therefore worked under very tragic conditions, but when the delivery of 30 new boats was assured for November, 1918, the chief of the submarine department felt that he had achieved the most that was possible.

September, 1917, brought the reopening of the submarine-cruiser operations, which was of enough importance to be mentioned in this short review. This was opened by the trip of Lieutenant Meusel with the *U–152* (former merchant submarine) and that of Commander Kophamel with the *U–151* (also former merchant submarine). extending over a period of more than three months and covering an area in the Atlantic Ocean as far as the Azores, sinking a total of from 30,000 to 40,000 tons. These submarine trips were under the direct command of the admiralty staff and held great promise of success, as this district was not so extensively patrolled by the enemy.

An especially successful trip of these former merchant submarines was that of the *U–155* (Commander Eckelmann) from January 14 to May 4, up to the blockaded district around the Azores and west of Gibraltar, with a record of approximately 50,000 tons; and, further. that of the *U–152* (Commander Kolbe) December 23, 1917, to April 19, 1918, to the Portuguese and African coasts and the Canary Islands, with a record of 30,000 tons. Of the remaining cruisers only two did "front" service up to the outbreak of the revolution—the *U–139* and the *U–140*. The *U–140*, under Commander Kophamel, was en route to the coast of North America from July 2 to September 20, 1918. It sank about 30,000 tons in all. The *U–139* and the *U–140* were greatly hampered by technical deficiencies common to all the new boats, such as, for instance, the pressure hull damage control and stability when submerging. Of the 38 sub-

marine cruisers equipped with two 3,000-horsepower Diesel motors which at the close of the war were about ready for delivery none were delivered in time to be of use on the front; the rapid 1,200-ton boats, the first of which—the *U–135*—had just been placed in service, suffered the same fate. Some of the new-type, large mine layers of the series *U–117* to *U–126*, capable of carrying 24 torpedoes and 42 mines, reached the front. A trip of the *U–117* under Lieutenant Droscher to the coast of North America, in the course of which 23,000 tons were sunk and a great number of mines laid, must be especially mentioned.

If the war had lasted longer, the three types of submarines just mentioned would undoubtedly have had very great success. The British watched the extensive reorganization of our submarines and the greater possibilities opened up to us by the new type now constructed with very grave concern. They brought us a superiority far in excess of the enemy's antisubmarine measures, a fact which the English, with their understanding of the naval war, could appreciate much more than the German people, and explains their expression of the "five minutes too early" at which the Germans gave up their arms.

The fact that the results of the submarine warfare decreased from May, 1918, on is due to the fact that the enemy began to gain supremacy in Flanders from this time on. From January, 1918, on the Flanders submarine flotilla lost an average of four boats per month. Added to this, there was the tremendously increased activity of the enemy flyers against the Brügge yards. Anyone who visited the Flanders submarine flotilla at Brügge at that time realized that this flotilla represented the outer right wing of the overstrained western front, and that no move for a reduction of the submarine activities from the Flanders base could ever be made either by the marine corps or the Flanders flotilla. It was the very spirit of Leonidas and his heroes, incarnate, that reigned in Flanders. On the other hand, there is the question as to whether or not a careful consideration of the risks and the results attained would not have caused the admiralty staff to have abandoned the Flanders submarine flotilla altogether. The men and material that were lost in Flanders during the spring of 1918 could never be replaced. From the beginning of the spring of 1918 it would have been far better to have sent the new B–III boats along with their experienced officers and men to the North Sea or the Mediterranean. After the submarine command of the North Sea had abandoned the passage of the Straits of Dover in the month of February, 1918, and left the method of operation to the judgment and experience of capable and experienced submarine officers (Lieutenants Rose and Saalwachter) the number of boats lost per month was reduced to two.

Even the "northern barrage" (the mine barrier between the Orkneys and Norway) which had been so carefully prepared by England and America and acclaimed with such pomp and enthusiasm, had no effect. Only two boats were lost in this way, the *U–156* (Lieutenant Feldt) and the *UB–127* (Lieutenant Schefflin). It can not be denied that the barrier was felt very keenly in the far north.

The acceptance of Wilson's fourteen points brought the submarine war to a close in October, 1918. The thought arose once more of using the boats for a purely military operation in cooperation with the fleet under the command of Admiral von Ripper (Admiral Scheer had assumed the chief command of the fleet according to the English practice). But it was too late. The collapse of our High Seas Fleet called back all the boats.

The submarine warfare did not bring the results contemplated; we are familiar with the reasons. However, the fame of the submarine commanders and crews will be eternal, and they will not be commemorated alone in stone and bronze but will also remain forever in the hearts of all Germans who have a right to be called such.

Even though the submarine war did not have the results expected, it nevertheless had a tremendous effect as a factor of naval power. In having to seek aid against our submarines from their American cousins, the English thereby relinquished their previous naval supremacy and placed themselves on a level with America in naval power. Our submarine war has shown England's vulnerability to all the world, and the recent submarine discussions in Washington, viewed in this light, are of the greatest interest to us.

GERMANY.

ORDNANCE TESTS.

22 October, 1922.

It has been reported that during the past month a number of tests have been carried out by the technical experts of the German army in the Baltic and on the island of Rügen, and in adjacent territory.

Great secrecy has surrounded these tests, but the arrangements which have been made for the transportation from Charlottenburg of certain things, or portions thereof, for use in the tests indicate that it was a question in this instance of a very dangerous explosive. These tests are probably a continuation of those already made with the long-distance explosions.

The tests are reported to have been made on the island of Rügen, from September 18 to September 22. It is not known how many persons were present, but an Austrian professor was there, as well as several other Austrians.

The Government sent several airships and mine layers and the Kiel torpedo boats for the purpose of aeronautical observations and special trials. The tests comprised: (*a*) Austrian invention, anti-aircraft gas shells. Improvements in the German method of long-distance explosions. (*b*) Land mines, distance explosions; submarine mines, distance explosions. (*c*) Rotatory mines capable of being directed against definite objects located at certain distances according to the mine charge. (Former tests on the island of Rügen in March, 1922). (*d*) Discharge of poison gases against balloons in order to determine the radius of action of the poison gases.

GERMANY.

PRE-WAR PLANS AGAINST BRITISH FLEET.

10 October, 1922.

Source: Reliable.

General.—The war plans are discussed to some extent in the history "Krieg zur See, 1914–18," in various chapters scattered through the complete work. It is stated that the documents available at the present time did not show a completely worked out plan of operations against England, some of these documents having been lost during the revolution, while in many cases these plans were the subject of verbal conferences, the result being that very little came to paper. In addition to the above, the organization of the navy department, the naval staff, and the office of the secretary of state for the navy, all being under the control of the Kaiser and accountable to him alone, resulted in the worst kind of confusion owing to the divided responsibility and the inevitable friction. Further the lack of cooperation between the naval staff and the general staff of the army was one of the prime reasons for the breakdown of the German offensive and the ultimate loss of the war.

The organizer and "father" of the German fleet, Admiral von Tirpitz, in 1914 was acting as secretary of state for the navy. In this capacity his authority was extremely limited, and his functions were advisory only. Admiral von Tirpitz stated that he was not even fully informed of the plan of operations for the fleet at the outbreak of the war; these plans being under the control of the naval staff. Considerable friction existed between the chief of the naval staff and the secretary of state for the navy. As if this was not bad enough, the state of affairs was further complicated by the fact that the Kaiser regarded the command of the navy as his special prerogative and insisted that all orders pertaining to the fleet operations, even to minor details, be referred to him for approval. Admiral von Tirpitz could only advise the naval staff, and such advice did not need

to be accepted. In considering the general plan for operations, the Kaiser was further influenced by his chancellor, who, for political reasons, desired to restrain the fleet from any purely offensive operations against Great Britain. As the Kaiser listened to von Bethman Hollweg rather than to the secretary of the navy, the result was to put all the naval operations on a more or less purely "defensive basis." In this view he was strengthened by the chief of the general staff of the army, as general headquarters showed a complete lack of comprehension of the functions of the navy during war. The above is a short summary of the general condition existing at the time of the outbreak of the war; and, as is known now, this serious condition grew worse as time went on, resulting finally in the resignation of von Tirpitz, the commander in chief of the fleet (the latter for ill health), the resignation of the chief of the naval staff, and, finally, the reorganization of the navy with the appointment of Admiral Scheer as chief of the admiralty, which happy result was achieved too late to be of any marked advantage to Germany's conduct of the war.

Preparations of the German Fleet for war.—The ratio of capital ships between Germany and England having been determined upon as a result of Lord Haldane's visit to Germany in 1912, the outbreak of the war found the German and British navies in a strength ratio of approximately two to three as regards battleships and battle cruisers. Admiral von Tirpitz believed that the maintenance of this ratio would be the minimum possible for Germany as England could then not attack the German Fleet without risking irreparable damage or defeat if she assumed the offensive. This policy was known in Germany as the building up of a "Risiko Flotte," and was the cardinal principle of the German building program. In spite of this fact, however, Admiral von Tirpitz, having in years previous laid down three fundamental rules for the designing and building of a battle fleet, felt that he could readily challenge the British Fleet to battle in 1914 with excellent chances for success. These three fundamental principles laid down by von Tirpitz were as follows:

(1) The ships must be built to float under all conditions. He held this to be the prime requisite. This resulted in the development of the comprehensive damage-control system and the excellent subdivision of the battleships. This was carried to such a point that the ships were scarcely habitable from our point of view. It was the limit to which the Germans could go and still regard their vessels as habitable. (As regards the extent of the subdivisions, the Russians had gone even further—to a point regarded by the Germans as impossible for sanitary living conditions.)

(2) The protection of the machinery and the development of the highest possible speed without sacrificing protection.

(3) The development of gunnery and ordnance material. The latter includes fire control, the development of which cost so much money that the admiral was forced to drop one ship from the building program in order to balance the naval budget.

Being satisfied that these three requisites had been fulfilled, that in material the Germans were superior to the British, and that the morale of the navy was excellent, von Tirpitz devoted all his energies to forcing the decision for an immediate offensive to bring the British Fleet to battle. In this he was unsuccessful in that he could not obtain the support of the naval staff and owing to the opposition of the chancellor. These fruitless efforts on his part finally resulted in his resignation.

The arguments of Von Tirpitz having failed, the naval staff then reasoned as follows: It was Germany's primary idea to force England to a naval battle as it was felt that a naval defeat would have the greatest effect on England's military policy and this was of the utmost importance to Germany on account of the increasing effects of the blockade. Each day's delay worked against Germany to the advantage of England. On the other hand, it was felt that England's great naval superiority made it necessary to attain some degree of equalization in power before attempting such a decisive battle by inflicting as much damage as possible through torpedo boats, submarines, and mines. (This was the view of the staff that conflicted with Tirpitz's idea.) However, it was not to Germany's advantage to force a battle at any price for in the event that England should be successful the reaction on the general military operations would be too serious. Apart from the fact that in such an event England would have been able to exert far greater pressure on the German coast, nothing would have stood in the way of the consolidation of the British and Russian fleets in the Baltic, and Germany would no longer be in the position to prevent English forces landing on the coast in the rear of the military forces. Without the pressure exerted by the German fleet the adjoining neutrals (Sweden, Holland, and Denmark) would have very probably changed their policy, which would also have been disastrous.

While a naval battle was Germany's prime object, just the contrary was true in the case of England. The blockade kept the Grand Fleet occupied in guarding the highways to and from the North Sea and the idea of a naval battle would only arise if their main object (the blockade) was interfered with. So long as this did not happen England could afford to let matters take their own course, all the more so as the downfall of Germany through the blockade would bring with it the destruction of the fleet.

The failure of this policy of the naval staff, i. e., to inflict sufficient damage on the British fleet to attain some degree of equaliza-

tion by means of mines, submarines, and cruiser warfare, finally culminated in the battle of Jutland. By this time the numerical superiority of the British fleet was too great to be overcome, and a decisive victory over the British was deemed impossible. The final decision of the naval staff was then as follows, viz: The one and only means then of forcing England to peace was to restrict her ocean traffic and injure her merchant marine through the submarine warfare, which then became the main naval policy. As the effects of such an operation could only be gradual the ultimate decision would then depend altogether on the energy with which the policy was put in operation.

Operations order for the North Sea.—His Majesty the Kaiser has issued the following orders for the war in the North Sea:

(1) Mission: To inflict the maximum damage on the English fleet by means of operations against the patrol and blockading forces near the German Bight, as well as mine and submarine operations carried to the English coast.

(2) After these operations shall have attained a measure of equalization in the strength of the forces, our forces shall be concentrated and prepared to engage under favorable conditions. If before this a favorable opportunity to engage occurs, full advantage should be taken of it.

(3) Commercial warfare to be conducted in accordance with prize rules. The extent of such warfare in home waters will be determined by the commander of the High Seas Fleet. Vessels designated for commerce raiding in foreign waters to be dispatched as soon as possible.

The above order as well as the following orders were issued to the fleet at the outbreak of the war as a result of the conditions and reasoning already mentioned:

CHIEF OF THE NAVAL STAFF.

BERLIN, *July 30, 1914.*

Operations order for the Baltic forces:

His Majesty has ordered the following for the conduct of war in the Baltic:

(1) Mission: To defeat as far as possible any probable Russian offensive. Secondary mission: To protect the Kiel Bight against attacks of Russian and English men-of-war and to damage enemy commerce in the Baltic.

(2) Undertake mine-laying operations against the Russian coast as soon as possible after the outbreak of the war.

(3) The question of temporary reinforcements from the High Seas Fleet for offensive operations against the Russian Fleet will be determined by the developments of the war.

(4) War on commerce to be conducted in accordance with "prize rules."

By Supreme Command.

(Signed) V. POHL.
Chief of the Naval Staff.

To the Commander in Chief, Baltic Fleet.

The above operations orders having been formulated before anything definite could be ascertained regarding the disposition and

probable intention of the British Fleet it became necessary for the naval staff to clear up this situation immediately.

Necessary orders having been issued for the security of the German Bight and the High Seas Fleet, the following campaign order was issued to gain information regarding the disposition of the English forces and to inflict the greatest damage possible on enemy forces:

COMMANDER FIRST SUBMARINE FLOTILLA.

NORTH SEA, 5 *August*, 1914.

Campaign order No. 1.

(1) Information regarding enemy will be verbally discussed.

(2) Mission: Attack the English main body supposedly in the North Sea, attack all cruisers where favorable opportunity offers. On the return attack all forces; damage enemy with all means.

(3) Here follows formation list of boats, the convoying vessels, etc.: *U–7*, *U–14*, *U–15*, *U–16*, *U–17*, *U–18*, *U–9*, *U–8*, *U–13*, *U–5*, cruisers *Hamburg* and *Stettin*.

(Signed) BAUER,
Commander First Submarine Flotilla.

The above orders concerning the operations of the fleet are based on the following assumptions:

(1) That the English would establish a "close blockade."

(2) That sufficiently strong enemy forces would take stations in the immediate vicinity of the German Bight to make this blockade effective.

(3) That sufficient damage could be inflicted on the English capital ships by means of mines, submarine, and destroyer operations to equalize the numerical disparity.

(4) That the security of the German Bight from attacks by the Grand Fleet being established, any raid could be defeated until the British strength had been worn down.

As history shows, all of these assumptions failed because England did not maintain the close blockade, and the patrol of the German Bight was left to English submarines and fishing vessels. The above was not fully established by the naval staff until the end of August, 1914, while the English raid on the German Bight on August 28, 1914, showed up the weakness of German methods of safeguarding their bases.

The month of August was principally occupied, therefore, in obtaining information regarding enemy strength and disposition and culminated in the English battle cruiser raid on the German bight on August 28, 1914.

Instead of being a factor to induce the naval staff to alter its original plan of operations and espouse the Tirpitz idea, the German

disaster of August 28, 1914, simply strengthened the Kaiser and chief of the naval staff in their determination to protect and save their light cruisers at all costs. Although the sinking of the *Cressy*, *Hogue*, and *Aboukir* aroused temporary hopes, it began to be realized that more energetic measures were necessary.

The naval staff still could not be brought to accept Tirpitz's idea of boldly seeking fleet engagement, while the position of the army in Flanders prevented him from obtaining the necessary support from general headquarters.

The German Admiralty's views on September 19, 1914, are expressed in the following extract from a report of Admiral Behncke to the chief of the naval staff:

> By a proper tactical disposition of our forces the enemy main body must pass through our line of submarines. In this manner an equalization of strength could be achieved as required by our plan of operation. The engagement would take place in our waters or in their vicinity. Further, if a westerly wind prevails, we have the leeward position. From this we should seek to engage on a southerly course. We could then lay tactical mine fields to advantage with chances of success. All in all, the chances of such a battle seem so favorable that it can be regarded as within the meaning of our plan of operations. This will undoubtedly lead to losses. But these will still probably leave us the favorable chances of success. If we are determined to fight, then we must not give up this oft-repeated favorable opportunity.

This idea of Admiral Behncke was rejected by the chief of the naval staff, who felt that the fleet should be kept intact and should not risk what might result in a decisive defeat.

Thus it came about that for September 22, 1914, the operations were to be conducted by the battle cruisers, accompanied by small cruisers, destroyers, and two submarines. These were to operate against the English blockading forces. The whole plan fell through, however, due to reports of British forces—battleships and battle cruisers—operating off Norway. The commander in chief of the fleet would not risk his battle cruisers under these conditions.

GERMANY.

NEW METAL.

20 October, 1922.

It is reported that a new light metal called aero has just been patented. It is very strong, nonrusting, and is impervious to the action of acids.

It is the invention of a certain Meizner, owner and director of a large metal works at Obercassel (Düsseldorf). He does not, however, manufacture the metal himself, as the German Government has acquired the rights after its examination and test by the tech-

nical military committee at Charlottenburg. (It is claimed that all new inventions must be submitted to this body before being patented.)

Krupp is at the head of the firms which will manufacture the metal for the Government, and it is believed that the metal will be used exclusively for aircraft.

It is said that Meizner did not expect such a turn of affairs, but the Government acted in this case as it always does with inventions which have a certain merit: when they have been examined by the above-mentioned committee at Charlottenburg, the Government converts them as it sees fit unknown to the inventor.

There was some mention of Meizner going to America, but the Government is having him carefully watched.

Meizner is a strong Nationalist and an opponent of the present form of government, but is not interested in politics in any way.

GERMANY.

IMPORTANCE OF MORALE.

12 October, 1922.

Source: "Marshal Psychologos," by Lieut. Hesse.

In his book, "Marshal Psychologos," First Lieutenant Hesse emphasizes the necessity of paying more attention to the psychology of troops. As a matter of fact, there is a bit of psychology in every tactical decision. The best tactical consideration may lead to failure unless the momentary psychological condition of the troops be taken into account. Indeed, in many situations and, as a rule, in the most difficult ones, psychology must be given the preference over purely intellectual tactics. To exercise a psychologically correct command is a prerequisite of actual warfare.

Based on experiences gained during four years' service as company commander at the front, the attempt will be made in the following to show how psychology and tactics go hand in hand in both large and small matters.

"The sense of strength in union is manifested most distinctly in the offensive. 'The infantry has advanced too far' was the constant complaint during the first years of the war. Notwithstanding this, it took a long time before that impulse was properly recognized and utilized as a means to success instead of being combated. Many a success was denied an attack of which the first objective was too modest. Field Marshal Hindenburg and General Ludendorff were the first to give free scope to the attack; and many successes show that they were right in so doing.

"We had been taking great pains for years in time of peace to move skirmish lines over a terrain at the intervals prescribed by regulations. We sometimes succeeded in doing so on the drill ground, but almost never in battle, for the instinct of gregariousness was stronger than all energy on the part of commanders. Since the war only have our new formations of open order—lines, files, and troops of skirmishers—made a virtue of necessity, thereby removing a permanent stumblingblock, for elements hitherto held fast are now free. But we must go still further and not only accept this gregarious instinct as inviolable but turn it to the best account. It undoubtedly promotes courage. Two men fighting together have more courage than that of two men fighting singly. This brings us back to the former spirit of association, which revived quickly at the front; but it must be officially recognized by regulations.

"After heavy defensive fighting, and replenished by frequently second rate reinforcements, the regiment to which I belonged was transferred from the western front to the Balkans in October, 1918. Distributed over inordinately large sectors and in wooded and mountainous districts, our mission was to arrest the Servian advance. Duly recognizing the psychological condition of the troops, and of the reinforcements in particular, the companies of one battalion were held together closely, each one porcupine-like. No elements were separated from them. Thus there was no feeling of isolation. The influence of commanders was able to penetrate rapidly everywhere. The two other battalions of the regiment, however, were in every position immediately split up into numberless sentries and pickets. The consequence was that the isolated elements were rapidly overwhelmed by the enemy, thereby causing the battalions to retreat, whereas the first mentioned battalion repelled all attacks. Further, self-confidence and soldierly sentiments increased unprecedentedly in that battalion. The second-rate reinforcements were no longer to be recognized, and the battalion stuck together during the revolution as though it had been held with iron.

"It is an important task of subordinate commanders to prevent the feeling of isolation from gaining ground. This may sometimes lead to decisions which do not correspond to purely intellectual tactics.

"A platoon has received the mission to attack a machine-gun nest behind a sector which may be crossed only by a narrow passage that is under fire. Protected by the fire of the light machine guns, a squad has succeeded in getting across. The platoon commander is now confronted with the following question: Shall I advance my light machine guns across the sector and then continue the attack, or shall I leave them in their present position and bring them up after the attack has succeeded? Cold reason replies: The firing

power of the light machine guns will not be improved by advancing them, and moreover, it can not be done without sustaining losses. I shall consequently leave them in their positions and continue the attack. Psychological considerations, however, say: The squad beyond the sector feels itself abandoned. It is apprehensive regarding protection of its flank, and the continuation of the attack will lack necessary spirit. The decision, therefore, is: I shall first advance my machine guns and then continue the attack.

"Similar considerations have caused us in many cases not to deploy troops under artillery fire into smaller units than platoons, even though sober calculation of the possibility of losses suggested that the platoons be broken up as well. Night attacks by large formations are as a rule to be avoided also from psychological reasons, for masses can not be kept under control at night. The instinct of self-preservation breaks forth unconstrainedly in darkness and spreads with lightninglike speed. In this case, too, purely intellectual tactics would come to the conclusion that night attacks in large formation are feasible if they be well prepared. Their success, however, is a matter of chance.

"Our infantry training during the war neglected bayonet fighting, for people thought that in reality there would be no such fighting and that the soldiers would be able to make bayonet thrusts without special training anyway. It must be remembered, however, that soldiers take only to weapons with which they are familiar. Whoever had the good fortune of leading German infantry to the assault between 1914 and 1918 knows with what happy assurance our soldiers fought with bayonets in 1914. In 1918, however, they preferred rifles and hand grenades, though their bravery was the same. This was especially true of sudden encounters in woods at night and in foggy weather. Whoever, confident of himself, grasped the bayonet then was victorious. The Russian infantry was an example in this respect, but it applied itself particularly to training with the bayonet. For that matter, psychological considerations played a more important part with the Russians than is generally supposed. Their whole method of attack is to be explained only from the psychology of their uneducated masses.

"Finally, that the soldier must know what he does and why he does it is a commonplace that is unfortunately frequently neglected. Whoever talks daily to his men about the reason and purpose of the activities in which they are momentarily engaged will harvest the fruit of his labor in seeing that they do their duty faithfully, even though they do not at first perceive such reason and purpose, and that they endure great hardships in the assurance that there must be a good reason for them."

The foregoing statements will not be new to officers who had experience at the front. Although we were frequently not aware of it, psychology was our daily bread in the field. However, we must gain a clear idea of the essence of command in battle, especially of such influences as can not be estimated properly in time of peace. For this reason First Lieut. Hesse is to be congratulated heartily for having opened up a question in a hitherto all but unexplored field.

GERMANY.

REPORT ON NAVY.

20 October, 1922.

Source: Reliable.

Ships in full commission.—Battleship *Braunschweig* (flag of senior officer, North Sea); light cruiser *Hamburg;* light cruiser *Arkuna.* Third (destroyer) division: *T–196*, *V–1*, *V–2*, *V–3*, *V–5*, *V–6.* Fourth (torpedo boat) division: *T–151*, *T–153*, *T–156*, *T–157*, *T–158.* (This is not yet commissioned, but will be put in commission April 1, 1923.) Battleship *Hannover* (flag of senior officer, Baltic); light cruiser *Medusa;* light cruiser *Thetis.* First (destroyer) division: *S–18*, *G–11*, *G–8*, *G–10*, *G–7*, *S–23.* Second (torpedo boat) division: *T–141*, *T–143*, *T–139*, *T–146*, *T–149.*

Ships for special purposes.—For survey: Gunboat *Panther;* sounding boats, *I*, *II*, *III*, *V;* net lighters, *1*, *2*, *6;* mine layers *C–5*, *C–7.* Tenders: *M–60*, *M–81*, *M–133*, *M–134*, *M–135*, *M–138.* (The latter two not warships.) Tenders for torpedo purposes: *T–154*, *T–168.* Tenders for artillery purposes: Small gunboats *Drache*, *Delphin*, *Hay*, *Fuchs.* For drilling purposes: Light cruiser *Berlin;* sailing vessel *Niobe.* Boats for drifting mine destroying purposes: *F–36*, *F–72*, *UZ–34*, *UZ–35.*

Ships in reserve (*out of commission*).—Battleships *Elsass*, *Hessen*, *Schlesien*, *Schleswig-Holstein*, *Preussen* (probably to be sold). Light cruisers: *Amazone*, *Nymphe*, *Niobe* (to be sold).

The German fleet (battleships and light cruisers) visited some Norwegian and Swedish ports during the past summer. The destroyers did likewise. From August 20 to September 16 fleet maneuvers took place in the North Sea and Baltic, especially torpedo practice and night attacks of destroyers. The lack of all modern equipment in aircraft, submarines, mines, etc., was very deeply felt. All ships used for sweeping the mine fields are not out of commission, the greater part having been sold for civil purposes. There are only 32 mine sweepers retained in reserve in the dockyards. Planes are being abolished according to paragraph 55 of the treaty of Versailles.

The personnel is taken over in the effective strength of men (15,000) approved by the Versailles treaty. The balance are granted discharges.

SPAIN.

PROTECTORATE IN MOROCCO.

10 October, 1922.

General Burguette, the new High Commissioner in Morocco, has recently arrived in Madrid for a consultation with Government officials regarding future policy. Reports in the press are very conflicting as to conditions in the Spanish zone, but it seems evident that the policy of "peaceful penetration," which the Government announced would be inaugurated with the appointment of General Burguette, will not be a success unless backed up with a powerful military force. Certain troops are being repatriated, but others are being sent to replace them, so it is doubtful if the military forces in Morocco are being materially reduced, as was announced would be the case.

In the western zone it is reported, though not officially confirmed, that Raisuli, the Moorish chief, traditional enemy of Spain, has submitted and will use his influence to obtain the submission of the tribesmen to the Spanish protectorate. This, if true, will considerably clear the situation in that zone and release troops for operations in the eastern zone against Ab-del-Krim, who shows no indication of submission to Spanish rule. It is announced that the policy of maintaining large numbers of small isolated posts will be abandoned; that instead strong garrisons will be maintained at a few strategic points, and that nine mobile columns will be organized, following the system employed so successfully in the French zone. At the same time it is reported that the High Commissioner is in favor of conducting landing operations at Alhucemas and that a strong show of force against Ab-del-Krim must precede any successful "peaceful penetration." In spite of continued efforts, there has been no success in obtaining the ransom of the Spanish prisoners held by Ab-del-Krim.

MILITARY STRENGTH OF NATIONS.

15 November, 1922.

MEXICO.

People generally ignorant, illiterate; lack strong national feeling; hate foreigners, especially Blue.

Government (republican) unstable; revolutions frequent; Blue, England, France, Belgium withhold recognition; Latin America, Germany, Japan most friendly powers.

Self-sustenance in food possible. Manufactures, few. Principal exports, oil and metals. Revenues (principally from foreign trade) barely equal current expenditures.

Location favors peace except with Blue. Physical geography favors defense; hinders people's progress, country's development; largely accounts for limited natural and artificial communications.

Navy negligible. Regular army (65,000) being modernized. Possible war effort: 120,000 in six weeks, 250,000 (maximum) in seven months. United opposition initially to Blue invasion, but solidarity vulnerable.

ARGENTINA, BRAZIL, CHILE.

Argentina.

Standing army, 22,000; expansion rapid to 600,000; is reducing deficiency in submarines; transportation inadequate except in east; discipline and training fair; navy negligible to first-class power.

Self-supporting in food. Sufficient munitions to start small war; for large needs imported munitions, export revenues, outside financial and other assistance.

Friendly with United States; suspects Monroe doctrine cloaks intent to dominate Western Hemisphere. Would probably assist United States except against Latin American country. Jealous of Brazil over dominance of South America.

Should defeat any South American alliance unless including both Brazil and Chile.

Foodstuffs, hides, wool; chief interest in Argentina to power at war.

Brazil.

Potential strength, 1,800,000; standing army, 50,000; expansion very slow; poor discipline, training, and transportation facilities; navy negligible to first-class power.

Self-supporting in food. Sufficient munitions to start small war; for large, needs imported munitions, revenue from exports, outside financial and other assistance.

Friendly with United States; suspects Monroe doctrine cloaks intent to dominate Western Hemisphere. Would probably assist United States except against Latin American country. Jealous of Argentina over dominance of South America.

Should defeat any South American alliance not including Argentina or Chile.

Rubber and coffee, chief interest in Brazil to power at war.

Chile.

Standing army, 17,000; can expand rapidly to 225,000; good discipline and training; transportation inadequate; navy negligible to first-class power.

Self-supporting in food except sugar. Sufficient munitions to start small war; for large, needs imported munitions, export revenues, outside financial and other assistance.

Friendly with United States; suspects Monroe doctrine cloaks intent to dominate Western Hemisphere. Would probably assist United States except against Latin American country. Greatest danger, Tacna-Arica question; Chile in possession will not start war; Peru and Bolivia, too weak.

Should defeat any South American alliance not including Argentina.

Nitrates, chief interest in Chile to power at war.

ITALY.

Through bloodless revolution Fascisti control Government with royal and unprecedented popular support, making Mussolini practically dictator. Probable inability to assimilate radical converts is greatest potential weakness. Internal policy seeks national discipline and financial retrenchment. Foreign policy unannounced.

Although party platform demands expansion, jeopardizing Yugo-Slav, Greek, British, and French interests. Mussolini's foreign communications are reassuring. New Government seeks American friendship.

Lacking resources and capital, overcrowded, and impoverished, Italy struggles to feed herself. Communications barely suffice.

Strong topography insures Italy's defense. Immediate major offensive impossible. Given time and raw materials procured externally, her maximum effort would exceed 5,000,000 men.

POLAND.

A State recreated, sixth in size in Europe, dangerously located between powerful enemies, and lacking natural frontiers.

A constitutional republic, lacking unity and strong leadership, with an inherent tendency toward territorial expansion.

Self-sustaining as to food, deficient in important raw materials, war crippled and undeveloped industrially, inadequate in communications, and financially bankrupt.

Her real military strength lies in her man power and national spirit. She is unable alone to sustain any major military effort.

Under proper government policies has possibilities of becoming an important State.

A revived Russia or Germany threatens her future existence.

SUCCESSION STATES.

Austria and Hungary are negligible as military powers.

The great element of weakness is Czechoslovakia; Yugoslavia and Rumania are the large unfriendly minorities. The most significant element of strength is the community of interest which led to the formation of the Little Entente.

The future of the succession States depends not so much upon their mutual relations as upon their relation to the general policies of the greater European powers. The rise of the Fascisti may affect the Italian policy as to Yugoslavia. The near eastern situation might have important relations to the Little Entente.

Yugoslavia, Czechoslovakia, and Rumania have relatively strong standing armies and large organized reserves, and their armies are well adapted to rapid expansion. They have universal military training. Reserves of munitions are being accumulated and plans for mobilization have been perfected.

The approximate available military man power is as follows:

	Regular army.	Trained reserves.	Untrained reserves.	Total.
Czechoslovakia	150,000	1,000,000	500,000	1,650,000
Yugoslavia	120,000	1,000,000	960,000	2,800,000
Rumania	180,000	1,220,000	400,000	1,800,000
Austria	25,000	475,000	250,000	750,000
Hungary	35,000	265,000	300,000	600,000

Efficiency of communications suffered from World War. New boundaries, for military and economic reasons, make readjustment necessary in addition to rehabilitation.

Shortage of rolling stock is being reduced and railroads and other means of communication are showing gradual improvement. Communications can meet needs of the present armies and enable civilian population to exist.

Generally geographical factors alone would result in a defensive attitude on the part of Yugoslavia and Rumania and an offensive one on the part of Czechoslovakia, Austria, and Hungary.

Neither Austria, Hungary, Rumania, nor Yugoslavia possesses the essential raw materials in sufficient quantities to render them, either collectively or individually, self-sustaining in war. None of them could now maintain a large army in the field without a great deal of external assistance. None of them has any credit upon which to finance a war.

Czechoslovakia, on the other hand, does possess large quantities of the essential raw materials for making war, together with many factories that could be employed in the conversion thereof into finished munitions, and she is the only one of the five countries under

consideration that could to-day maintain a large force in the field. But in an emergency requiring her maximum effort, she, too, would require a great deal of external assistance.

The attitude of the various succession States toward the United States in case the latter becomes involved in war with Green or Orange or Red-Orange is relatively unimportant.

TURKEY AND GREECE.

Turkey.

1. Elements of military strength:
   - (*a*) Allied jealousy and cross-purpose in the Near East.
   - (*b*) Unification of the State into a nation under a strong leader with a common purpose.
   - (*c*) Friendship of France, Bulgaria, Germany, and Russia.
   - (*d*) Her own militaristic qualities.
   - (*e*) A growing army with nearly a million men in reserve.
   - (*f*) Pan-Islamism.
2. Elements of military weakness:
   - (*a*) Lack of sufficient food and raw materials, also of factories and artisans for conversion of latter.
   - (*b*) Lack of communications and shipping.
   - (*c*) Her dependence upon sea communications; vulnerability of same.
   - (*d*) Lack of navy.
   - (*e*) Dependence upon other countries for financial aid and munitions.
   - (*f*) Weakness in constructive administrative ability and corruption in administration.

Greece.

1. Elements of military strength:
   - (*a*) Strongly nationalistic and patriotic.
   - (*b*) Friendship of Great Britain.
   - (*c*) Comparatively strong merchant marine and fair navy.
   - (*d*) Topographical features aid defense.
   - (*e*) Provisions for mobilization and military policy laid down in law.
2. Elements of military weakness:
   - (*a*) Lack of political and military leadership.
   - (*b*) Lack of stability in army or civil population under reverses.
   - (*c*) Strategic weakness of northern area east of Vardar River.
   - (*d*) Poor internal communications.

2. Elements of military weakness—Continued.

(*e*) Dependence upon foreign countries for financial aid and munitions.

(*f*) Sea communications vulnerable.

(*g*) Not self-sustaining as to food.

(*h*) Lack of raw materials and factories and skilled artisans to convert same.

FRANCE.

France is a highly centralized parliamentary Republic whose international relations dominate her internal situation and whose foreign policy will be a vital factor in the restoration of Europe to normal conditions.

She has a great military machine, readily adaptable to the consolidation of an empire, her future ambition.

The weakness in her economic structure is her finances. Her industries, communications, food production, and munitioning capacity would with some emergency modifications provide the means for an independent maximum effort not involving a major overseas conflict.

Her geographical position and physical features give her great defensive strength, except along her northeastern frontier.

GERMANY.

While patriotism is at low ebb, national feeling is strong, and Germany would solidly oppose outside aggression. Republican government has support of majority. Foreign policies are dictated by Versailles treaty. Attitude toward rest of world conciliatory. Greatest need is commercial restoration. Economic situation improving. Food production is 60 per cent of the requirements. Industry reviving. Finances in bad shape due to inflation. Reparations can not be met. Internal communications are 80 per cent as efficient as in 1913; exterior communications, 35 per cent. Standing army, negligible. Man power estimated at 4,500,000. Immediately available, 400,000. Treaty prohibition against accumulation of munitions. At present Germany is incapable of a major effort.

RUSSIA.

Considering all factors necessary for making war, Russia is capable of such an effort in the following order of political probability and economic possibility:

(*a*) Conquest of those lands that until recently formed part of the old Empire; theaters for this embrace available material, personnel, and transportation.

(*b*) Against any who would too strongly dominate the Black Sea and the road to the Persian Gulf. The probability of this increases

with time. Distance and difficulty involved would be surmounted as in the past.

BRITISH EMPIRE LESS CANADA.

Her strength lies in the solidarity and self-reliance of her English-speaking population, her ability to develop self-government in remote diverse communities, her efficient regular army, large reserves of mutions, supplies, and trained man power.

Her life is absolutely dependent on trade. She is self-sustaining except in oil, copper, cotton, and wheat.

With the isolation of her possessions from land attack, her powerful navy and merchant fleet are vital to maintain her commerce and protect her scattered territory and lanes of communications.

Sea power is her greatest strength and insular position her greatest weakness.

JAPAN.

Basic policies.—Domination of western Pacific and eastern Asia.

Present policies.—Industrial development and commercial expansion: peaceful economic and political penetration of China: development of auxiliary military and naval material: regaining international good will.

Factors of military strength.—Solidarity, autocratic government, geographic position, efficient army, large trained reserves, and policy of preparedness. The armament limitation improves her strategic position.

Weakness.—Lack of native iron, cotton, and oil: poor financial condition.

Conclusion.—Japan is a probable formidable enemy capable of offensive operations in the western Pacific but not in the eastern Pacific. Her defeat by Blue would be difficult but certain.

CHINA.

China, the oldest and most populous country, is lacking in national unity, is weak politically, economically, and militarily, with her central government practically not functioning. She is impotent against foreign powers, and her despoliation has been limited only by the jealousies and intrigues among the powers themselves.

She is unable to mobilize her industrial strength for war purposes, but were such possible its output could not supply a large modern army. Scarcity of communications preclude military operations on a large scale, and the troops now under arms are scattered over a vast stretch of territory, poorly equipped, and without centralized control.

CANADA.

People virile, intelligent, self-reliant, united, patriotic. Self-governing. Empire controls foreign relations.

Friendly and valuable to Blue as ally or neutral in war not involving empire.

Economically generally self-sustaining. Important deficiencies, coal, iron, rubber, cotton. Surplus, food. Dependent for deficiencies on America. Factories convertible for manufacture necessary munitions.

Roads poor. Railroads good. Water routes good. Factories vulnerable to attack. Finances sound.

Military, permanent, 4,000; nonpermanent, 50,000. District commanders, staffs, mobilizations plans provided. Maximum effort, 300,000. Mobilization, 6 divisions one month, 11 divisions two months, 2 per month thereafter. Navy negligible.

UNITED STATES.

Elements of military strength:

- Geographic location.
- Fourteen million men available for combatant service.
- Present defense laws the best in country's history.
- Sufficiency in food, industries, raw materials, and munitioning capacity.
- Adequate communications.
- Strong financial system.
- Willingness of country to support a war administration.
- Possession of Panama Canal.

Elements of military weakness:

- No law covering selective service.
- Air service deficient in personnel and equipment.
- Naval bases inadequate.
- Lack of rubber, nitrates, and a few minerals.
- Location of principal industrial area.
- Exposed location of certain rail and water routes.
- Policy of preparing for war in time of war.
- Possession of Philippines.

ECONOMIC EUROPE.

2 November, 1922.

During the 12 months ending June 30, 1922, our foreign trade suffered in common with the general world depression. The monetary value of our exports and imports during the period in question,

in comparison with the previous fiscal year, is shown in the following table:

	1920–21	1921–22
Imports	$3,654,459,346	$2,608,079,008
Exports	6,516,510,033	3,771,286,428
Total foreign trade	10,170,969,379	6,379,365,436
Balance of exports over imports	2,862,050,687	1,163,207,420

The fall in the monetary value of imports was, therefore, 28.6 per cent, in exports 42.1 per cent, and in total trade 37.3 per cent. The great decline in value from the previous year was due in a large degree to a fall in prices rather than in quantities, as indicated by the tables of quantity movements of larger commodities in this statement. From these tables it will be seen that our agricultural exports were actually larger in quantity during the year of depression, although they decreased in value by about $700,000,000. A study of the whole export and import list, so far as quantitative statistics are available, indicates that roughly our trade in 1922, if it was valued at 1921 prices, would have shown a decrease in exports of 12 per cent, an increase in imports of 29 per cent, or an increase in total trade of roughly 2.7 per cent.

INVISIBLE EXCHANGE.

The influence of the balance of invisible exchange in our whole trade and financial relationships is of growing importance. It is possible to estimate roughly some elements in invisible exchange, such as public issues of foreign loans, tourist traffic, remittances of immigrants; and freights; but other items, such as private loans, reciprocal interest payments, investments, and loss by speculation in foreign currencies are unknown factors. Foreign loans were issued publicly during the fiscal year to the amount of $1,015,000,000, as compared with $618,000,000 during the previous year. What the ebb and flow of private loans may have been is, of course, unknown. It would appear that the net balance of the other items against us amounted to a minimum of from $400,000,000 to $500,000,000 per annum. In any event, the invisible exchange against us could be approximated at not less than about $1,000,000,000 or $1,100,000,000 in 1920–21 and about $1,400,000,000 or $1,500,000,000 in 1921–22.

The balance of goods in our favor drew a net amount of $449,000,000 in gold and silver during the fiscal year 1922, as compared with $511,000,000 during the previous year.

For the year 1920–21 the excess of export goods over imports, i. e., the total trade balance of $2,862,000,000, was liquidated in part by

$511,000,000 in precious metals shipped to us in part by invisible exchange of, say, $1,100,000,000, leaving an apparently unliquidated balance of about $1,200,000,000 to $1,300,000,000 for that fiscal year. A study of the banking returns of unfunded foreign advances at this time does not bear out the conclusion that such an amount of private financing of exports, as indicated above, was ever undertaken, and thus the probabilities are that the speculative losses in European currencies and other investments and other forms of invisible exchange were even larger than has been estimated above.

For the year 1921–22 the excess of exports over imports of $1,163,000,000 was liquidated in part by $449,000,000 net imports of precious metals, and this, together with the additional estimated balance against us of $1,500,000,000 of invisible exchange, exceeds the amount necessary to square accounts by some $750,000,000. No doubt this was at least partly absorbed in repayment of private loans, because even a smaller amount of private export financing existed in July, 1922, than in July, 1921. Generally this change indicates a much sounder and firmer basis of trade.

GOLD MOVEMENT.

The gold situation in the world is a matter of a great deal of economic thought, and no doubt the heavy drain to America has contributed to the instability of foreign currencies not only by the diminution of their essential guaranties but also by their fluctuation involved in liquidating trade balances in this fashion. Our gold stocks amount to about $3,077,000,000. Of this the minimum legal necessities at the moment for assurances to our currency and credits amount roughly to about $1,600,000,000, but for a 60 per cent reserve of security we would require about $2,400,000,000. Therefore our surplus amounts to somewhere over $700,000,000. While this is an asset it nevertheless would be more advantageous to us if it were in active use. The automatic tendencies in our international trade and financial relations are, however, setting strongly toward rectification of this whole situation without artificial action.

There is a steady increase in the ratio of imports to exports of goods, as indicated by the decrease in the average monthly balances in our favor over the last two and one-fourth years.

Six months:	Average monthly balance in our favor.
July 1 to December 30, 1920	$274,674,811
January 1 to July 1, 1921	202,333,636
July 1 to December 30, 1921	126,980,328
December 30 to July 1, 1922	66,887,576
Three months, July 1 to October 1, 1922	51,623,542

At this rate we would, theoretically, reach a balance in the movement of goods in another few months. However, economic movements do not proceed on time schedules, although their trends are no less positive. Many uncertain factors naturally affect commodity movements and but little beyond tendencies can be noted. It would, at least, appear that the invisible exchange is certainly able to take care of commodity balances and that we are reaching the end of the gold import stage of war readjustments. Continued trend in the general direction now evident would soon produce gold exports even in the face of payments on account of allied debts.

SHIFTS IN THE CHARACTER OF EXPORTS.

There are several important shifts in our foreign trade due to the war. The export of foodstuffs has immensely increased, due partially to the demoralization of Russia. There is, at best, no probability of Russian exports of large volume for another two or three years, not only because of the condition of agriculture but also because of the demoralization of her railways. There has been a decrease in raw cotton exports, due to various causes, chiefly short production, but partly due to steady increase in our cotton manufactures.

The following table shows the quantitative movement of major agricultural exports, pre-war and for the last two fiscal years:

	1913	1921	1922
Grain and grain products.....bu..	$258,343,629	$543,375,523	$544,220,964
Meats, dairy products, animal and vegetable fats....lbs..	1,610,053,715	2,384,517,262	2,192,174,236
Tobacco leaf.....lbs..	418,796,906	496,878,830	451,555,221
Cotton, raw.....bales..	8,724,572	5,408,986	6,541,841
Fruits.....lbs..	620,423,027	675,892,388	491,227,140
Oil cake and meal.....lbs..	2,049,361,136	857,606,407	1,099,246,797
Total values.....	1,029,967,344	2,192,335,101	1,557,372,997
Total values at 1913 prices.....	1,029,967,344	1,126,682,282	1,168,521,140

About 55 per cent of our total exports are agricultural produce and raw materials and 45 per cent are manufactured and partly manufactured goods (excluding manufactured foodstuffs).

About 75 per cent of our exports of agricultural produce and raw materials go to Europe and about 25 per cent to the rest of the world.

About 26 per cent of our manufactured goods go to Europe and 74 per cent elsewhere.

Our exports of agricultural produce comprise, roughly, 15 per cent of the entire crop value on the farm, while our exports of manufactured goods comprise less than 4 per cent of our production. Our exports of agricultural produce to Europe comprise 11 per cent of the

value of our agricultural production, and less than 1 per cent of our manufactured production.

This last fact has much to do with our ability to shake loose from European economic currents in the manufacturing industries and with the strengthening of employment in our home industries, we will, no doubt, increase home consumption in agricultural products.

A pronounced shift in our foreign trade during the past few years is the increasing ratio of imports from tropical countries. A study of this situation reveals that over one-half of our imports are of tropical origin (rubber, sugar, coffee, woods, etc.), as against about one-third of such imports before the war. The balance of trade is heavily against us in the tropics as a whole. A study of the trade of these particular countries indicates that the excess of our imports from those areas over our exports to them is about $500,000,000 per annum, which is largely used by them for the purchase of manufactured goods from Europe, thus to a considerable extent liquidating the excessive balance in our favor in our European trade, created by shipping to Europe our agricultural produce. This triangular operation seems likely to increase as tropical goods do not materially conflict with our own production and our consumption of these commodities is likely to increase steadily.

PERSONNEL

GREAT BRITAIN, JAPAN, UNITED STATES NAVIES.

Table showing comparative personnel strengths of navies of Great Britain, United States, and Japan on October 1, 1922, with explanation tables and notes.

	United States.			Great Britain.			Japan.		
	Officers.	Men.	Total.	Officers.	Men.	Total.	Officers.	Men.	Total.
Regular Navy (see note 16)[1]	7,707	[2 3 4] 86,512	94,219	[1 5] 8,217	84,041	[1] 92,258	[7] 7,705	65,469	73,174
Australian Navy [8]	.....	.....	.....	428	3,814	4,242	.....	.....	.....
New Zealand Navy [9]	.....	.....	.....	4	415	419	.....	.....	.....
Canadian Navy [10]	.....	.....	.....	59	300	359	.....	.....	.....
Royal Indian Marine [11]	.....	.....	.....	251	1,850	2,101	.....	.....	.....
Royal Fleet auxiliary [12]	.....	.....	.....	.....	1,944	1,944	.....	.....	.....
Navy signaling section [13]	.....	.....	.....	18	327	345	.....	.....	.....
Men on yard craft or mercantile agreement [14]	.....	.....	.....	.....	2,143	2,143	.....	.....	.....
Proportion of Royal air force assigned the navy [15]	.....	.....	.....	445	8,100	8,545	.....	.....	.....
Total	7,707	86,512	94,219	9,422	102,934	112,356	[7] 7,705	65,469	73,174

[1] The figures shown are as of October 1, 1922. The Admiralty have announced that the numbers to be retained on March 31, 1923, will be 7,893 officers including 73 naval constructors and 119 engineers and 81,168 enlisted men. This would reduce the total to 9,098 officers and 100,061 men.

[2] Average number of men U. S. Navy borne during the year will be 86,000.

[3] An analysis of the turnover in enlisted personnel for United States shows that the turnover will be approximately 57,000 men, of which 19,000 will be reenlistments and 38,000 first enlistments. In other words, the "turnover" is equal to practically two-thirds of the total enlisted strength. The term of enlistment in the British Navy is for 12 years. About 20 per cent are on their second enlistment.

[4] Includes 490 officers and 3,170 men required for aviation.

[5] Includes 73 civil engineers and 119 naval constructors. Naval constructors and civil engineers are not officers in British Navy, but perform same duties as naval constructors and civil engineers, who are officers in U. S. Navy. British naval constructors and civil engineers are paid from navy votes. Does not include Coast Guard.

[6] Does not include Coast Guard, composed entirely of officers and men who have served in Royal Navy. Coast Guard will probably be reorganized shortly, and upon reorganization the portion of it remaining under the control of the Admiralty will consist of 18 officers and 327 men. The Admiralty have fixed for the Naval Establishment a total of 101,300 (i.e., 98,500 and 2,800 Coast Guard), excluding naval constructors, civil engineers, officers on unemployed or half pay, officers lent to Foreign and Dominion Governments, but including Coast Guards and Marines.

[7] Does not include midshipmen at sea. Midshipmen at sea correspond to ensigns, U. S. Navy.

[8] 109 (known) officers and 400 (estimated) men from Royal Navy are lent to Australian Navy.

[9] 30 (known) officers and 11 (known) men from Royal Navy are lent to New Zealand Navy.

[10] 15 (known) officers and 99 (known) men from Royal Navy are lent to Canadian Navy.

[11] Royal Indian Marines are engaged in running transports. Officers rank with but after Royal Navy officers men are enlisted. This is Naval Establishment of Indian Government.

[12] Royal Fleet auxiliary mans colliers and tankers, includes men and officers. May be reserves or merchant sailors, but perform duties assigned to our Regulars.

[13] To be transferred from Coast Guard. (See note 6.)

[14] See Table II; number given includes men and officers. May be reserves or merchant sailors, but perform duties assigned to our Regulars.

[15] Air Ministry stated to naval attaché, London, that in case of separation of Royal air force into an army wing and a navy wing the line of division would, generally speaking, adhere to the existing division between coastal and inland areas. He furthermore added that in peace time those allotted to the navy would not be less, but likely more than now represented by coastal areas. Total number, 445 officers, 8,100 men. (Radio 0102–2300 May 6, 1922.) It is stated by the Admiralty that the number engaged in naval aviation is 209 officers, 1,154 men. (Radio 1617–1400, October 18, 1922.) Number is varied to suit demands of land or sea operation. Prior to consolidation 30 per cent of the total air force was in the navy.

[16] On October 1, 1922, the following is a comparison of officers and men serving ashore.—United States: Officers, 45 per cent; men, 32.7 per cent. This includes aviation stations, which are not included in British Navy. Great Britain: Officers, 32 per cent; men, 32 per cent. Japan: Officers, 60 per cent; men, 60 per cent.

TABLE II.—*Number of men other than Royal Navy provided under navy estimates, 1922–23, to man auxiliaries and corresponding number of regulars, United States Navy, required for same duties.*

	Great Britain.			United States.		
	Officers.	Men.	Total.	Officers.	Men.	Total.
Colliers and tankers [1] [10]	.....	.....	[2] 1,944	(11)	(11)	(11)
Various yard craft [3]	.....	.....	[4] 1,539			
Ammunition ships (naval armament vessels) [5]	.....	.....	[6] 216			
Victualing yard craft [7]	.....	.....	[6] 78			
Hospital ships [8]	13	97	[6] 110			
Transports [9]	257	1,850	[6] 2,101			
Total	264	1,947	5,988	.....	.....	.....

RESERVES.

	United States.			Great Britain.			Japan.		
	Officers.	Men.	Total.	Officers.	Men.	Total.	Officers.	Men.	Total.
United States, class 1	385	6,859	7,244	.....	.....	.....	.....	.....	.....
United States, class 6	4,094	7,136	11,230	.....	.....	.....	.....	.....	.....
Royal naval reserves	.....	.....	.....	1,644	7,551	9,195	.....	.....	.....
Royal fleet reserves	.....	.....	.....	0	35,352	35,352	.....	.....	.....
Royal naval volunteer reserves	.....	.....	.....	166	1,897	2,063	.....	.....	.....
Japanese uaval reserves	.....	.....	.....	.....	.....	.....	[12] 694	[12] 33,400	[12] 4,094
Total	4,479	13,995	18,474	1,810	44,800	46,610	694	33,400	34,094

MARINE CORPS.[13]

United States.			Great Britain.[14]			Japan.[15]		
Officers.	Men.	Total.	Officers.	Men.	Total.	Officers.	Men.	Total.
1,124	19,500	20,524	403	9,388	9,791	0	0	0

[1] Number stated by Admiralty as manning tankers and yard fueling craft, i. e., tankers 1,537, yard fueling, 457, total 1,944. Number provided in Navy estimates, p. 255, is 1,977. In addition, some colliers are time chartered.

[2] The various Naval Reserves of the Dominions are not included in above.

[3] Number shown for British Navy is total numbers provided on pp. 58, 106, 112 of Navy Estimates, 1922–23. Actual number on Oct. 1 unknown.

[4] Estimated.

[5] Actual number on Oct. 1, British Navy, unknown. Number shown is number provided in Navy estimates, 1922–23, p. 127.

[6] Known.

[7] Above is number stated by Admiralty on Oct. 24, 1922, as manning store ships and water boats. Number provided in Navy estimates, 1922–23, p. 44, is 291.

[8] Number shown is number of officers and men to man ships; hospital staffs are excluded.

[9] Royal Indian Marines is number shown in British column.

[10] Japanese tankers manned by navy. Other items of above table not manned by navy.

[11] All manned by regular U. S. Navy.

[12] Whatever reduction of regular personnel is made will represent an increase in reserves.

[13] United States marines 1,877 men, 59 officers serve afloat. Royal marines 4,975 men, 169 officers serve afloat. Percentage of marines serving afloat: United States: Officers, 5.4 per cent; men, 9.2 per cent. Great Britain: Officers, 31 per cent; men, 53 per cent.

[14] Number shown is number announced by Admiralty to be retained on March 31, 1923. Strength of Royal Marine Corps on October 1, 1922, was 483 officers, 9,614 men. Strength of United States Marine Corps on October 1, 1922, was 1,124 officers 20,382 men.

[15] Eight hundred and fifty marine police under Minister of Marine, who perform same duties as United States marines guarding navy yards.

Remarks on Enlistment.

UNITED STATES.

Enlistments in the Navy are for two, three, and four years. These short periods of enlistment results in a heavy turnover in recruits and discharges each year. It is estimated that 57,000 men will be enlisted during the year, of which 38,000 will be first enlistments and 19,000 reenlistments. An examination of the enlisted personnel of June 30, 1922, shows the following:

Men with less than 4 years' service	68,646
Men with 4 and less than 8 years' service	9,152
Men with 8 and less than 12 years' service	5,169
Men with 12 and less than 16 years' service	3,693
Men with more than 16 years' service	1,920
Total	88,580

Of the above, 58,582 were not over 24 years of age.

GREAT BRITAIN.

On October 1, 1922, the 84,041 men in the British Navy were divided as follows:

(*a*) Serving first enlistment of continuous service (viz, for 12 years)	57,432
(*b*) Serving second period of continuous service (viz, 10 years to complete time for pension)	18,136
(*c*) Short service (5 years) plus 7 years in reserve	4,915
(*d*) Noncontinuous service	1,458
(*e*) Foreigners	1,632
(*f*) Pensioners and miscellaneous	468
Total	84,041

The 1,458 noncontinuous-service ratings are practically all stewards and cooks.

The foreigners consist of 903 foreign natives (Chinese, Kroomen in tropical climates, etc., and 729 Maltese.)

Pensioners and miscellaneous are subdivided—388 pensioners, 80 miscellaneous.

JAPAN.

Enlistment for all petty officers is 10 years (6 years active, 4 years reserve). Other enlisted men is for 12 years. For volunteers—6 years active, 6 years first reserve. For conscripts—4 years active, 3 years first reserve, 5 years second reserve.

The enlistments for 1921 were 16,066. The transfers from active to reserve status were 14,370.

NAVAL PROGRAMS.

September 1, 1922—Ships building and projected.

NOTE.—No restrictions on any type except capital ships and aircraft carriers.

	Great Britain.		United States.		Japan.		France.		Italy.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Light cruisers, first line	4	34,600	10	75,000	21	136,600	3	24,000	2	16,000
Destroyer leaders	2	3,500	0	0	0	0	6	14,400	6	12,270
Destroyers, first line	6	7,450	[1] 0	0	38	49,155	12	16,800	12	11,680
Submarines, first line	6	5,550	34	29,575	16 28	13,480 ([2])	12	13,200	4	2,600
Fleet submarines	2	3,800	[3] 3	6,375	3	4,500	0	0	0	0
Aircraft carriers	Estimated all powers will build aircraft carriers up to tonnage allowance.									

[1] 12 destroyers authorized but not under contract.
[2] Tonnage unknown.
[3] 6 additional fleet submarines authorized but not under contract.
NOTE.—Aircraft carrier tonnage allowed by treaty as follows: United States, 135,000; British Empire, 135,000; Japan, 81,000; France, 60,000; Italy, 60,000. No aircraft carrier to exceed 27,000 tons, except that each power may build two of 33,000 tons, provided tonnage allowance not exceeded thereby.

Ships retained September 1, excluding those to be scrapped under treaty; ships over 12 years of age not included.

	Great Britain.		United States.		Japan.		France.		Italy.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Capital ships	22	[1]580,450	18	[2]500,650	10	301,320	9	194,421	6	143,000
Cruisers, first line	2	34,600	0	0	0	0	0	0	0	0
Cruisers, second line	0	0	0	0	0	0	2	28,200	2	21,000
Light cruisers, first line	41	171,880	0	0	11	54,850	4	19,260	5	21,000
Light cruisers, second line	13	69,230	0	0	0	0	1	3,444	5	17,300
Destroyer leaders	17	29,458	0	0	0	0	1	2,485	6	10,300
Destroyers, first line	178	200,383	295	350,591	54	56,035	20	19,122	27	21,649
Destroyers, second line	6	4,200	21	15,582	12	7,850	24	16,397	16	11,840
Submarines, first line	42	33,740	59	37,120	27	23,538	24	18,403	10	8,040
Submarines, second line	34	14,608	27	10,645	8	2,689	24	9,610	33	9,610
Fleet submarines, first line	6	11,280	3	3,318	0	0	0	0	0	0
Fleet submarines, second line	6	7,200	0	0	0	0	2	3,094	0	0
Monitor submarines	3	4,800	0	0	0	0	0	0	0	0
Aircraft carriers, first line	4	62,590	0	0	0	0	1	24,830	0	0
Aircraft carriers, second line	3	25,900	1	12,700	1	9,500	0	0	0	0

[1] On completion of two new ships to be constructed, Great Britain will scrap four capital ships, and total tonnage retained will be 558,950.
[2] On completion of West Virginia and Colorado, United States will scrap North Dakota and Delaware, and total tonnage retained will be 525,850.

Ships to be scrapped by treaty.

	Great Britain.		United States.		Japan.		France.		Italy.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Old capital ships	20	408,500	15	227,740	10	164,000	0	0	0	0
Capital ships under construction	0	0	13	552,600	6	255,800	0	0	0	0

NOTE.—Any of the powers may retain any two ships, which would otherwise be scrapped, for conversion to aircraft carriers, providing displacement of each does not exceed 33,000 tons.

VALUES OF FOREIGN CURRENCIES.

30 OCTOBER, 1922.

Source: Federal Reserve Bank of New York.

Country.	Monetary unit.	Noon buying rate for cable transfers in New York (value in U. S. dollars).	Value a year ago.
Europe:			
Austria	Krone	$0.000014	$0.0004
Belgium	Franc	.0652	.0713
Bulgaria	Lev	.006442	.....
Czechoslovakia	Krone	.032361	.0098
Denmark	do	.2009	.1905
England	Pound sterling	4.4400	3.93
Finland	Markka	.023625	.....
France	Franc	.0709	.0727
Germany	Reichsmark	.000216	.0059
Greece	Drachma	.0202	.0469
Holland	Guilder	.3909	.3407
Hungary	Krone	.000403	.0013
Italy	Lira	.0407	.....
Yugoslavia	Krone	.004408	.0034
Norway	do	.1791	.1318
Poland	Mark	.000081	.0002
Portugal	Escudo	.0553	.....
Rumania	Leu	.006479	.0067
Serbia	Dinar	.017614	.0136
Spain	Peseta	.1527	.1333
Sweden	Krona	.2671	.2250
Switzerland	Franc	.1831	.1839
Asia:			
China	Chefoo tael	.7742	.....
Do	Hankow tael	.7725	.....
Do	Shanghai tael	.7441	.8050
Do	Tientsin tael	.7858	.....
Do	Hongkong dollar	.5536	.5737
Do	Mexican dollar	.5415	.....
Do	Tientsin or Peiyang dollar	.5529	.....
Do	Yuan dollar	.5492	.....
India	Rupee	.2900	.2725
Japan	Yen	.4804	.4793
Singapore (S. S.)	Dollar	.5192	.....
North America:			
Canada	do	1.001146	.....
Cuba	Peso	.998688	.....
Mexico	do	.4830	.....
Newfoundland	Dollar	.998594	.....
South America:			
Argentina	Peso (gold)	.8166	.....
Brazil	Milreis	.1118	.....
Uruguay	Peso	.7731	.....
Chile	Peso (paper)	.1374	.....

20 NOVEMBER, 1922.

Country.	Monetary unit.	Noon buying rate for cable transfers in New York (value in U. S. dollars).
Europe:		
Austria	Krone	$0.000014
Belgium	Franc	.0675
Bulgaria	Lev	.0069
Czechoslovakia	Krone	.031569
Denmark	do	.2019
England	Pound sterling	4.4903
Finland	Markka	.0258
France	Franc	.0720
Germany	Reichsmark	.000155
Greece	Drachma	.0147
Holland	Guilder	.3932
Hungary	Krone	.000415
Italy	Lira	.0468
Norway	Krone	.1831
Poland	Mark	.000065
Portugal	Escudo	.0452
Rumania	Leu	.00655
Serbia	Dinar	.016029
Spain	Peseta	.1530
Sweden	Krona	.2678
Switzerland	Franc	.1860
Yugoslavia	Krone	.003997
Asia:		
China	Chefoo tael	.7408
Do	Hankow tael	.7400
Do	Shanghai tael	.7145
Do	Tientsin tael	.7442
Do	Hongkong dollar	.5339
Do	Mexican dollar	.5208
Do	Tientsin or Peiyang dollar	.5367
Do	Yuan dollar	.5317
India	Rupee	.2981
Japan	Yen	.4841
Singapore (S. S.)	Dollar	.5206
North America:		
Canada	do	1.000226
Cuba	Peso	.998875
Mexico	do	.495156
Newfoundland	Dollar	.9975
South America:		
Argentina	Peso (gold)	.8217
Brazil	Milreis	.1262
Uruguay	Peso	.7993
Chile	Peso (paper)	.1211

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